CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, July 25, 1907.

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CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

(denotes that this work is advertised in Engineering News.)*

The following Plans (P.) and Specifications (S.) are on file and may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

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RAILWAYS.

ALEXANDRIA, ZIMMERMAN & NORTHWESTERN.—This company has been chartered in Louisiana. The incorporators are: J. A. Bentley, E. W. Zimmerman, Paul Lisso, J. A. Prinley, A. F. Sharpe, W. D. Hill and E. Beuhler, all of Alexandria, La. The company will construct and operate a railroad from Alexandria to Zimmerman, La., to carry passengers, lumber, timber and all kinds of freight. It is capitalized at $230,000 and provision is made to increase the capital stock to $1,000,000 if it becomes necessary. The officers are: J. A. Bentley, Pres.; E. W. Zimmerman, Vice-Pres.; A. F. Sharpe, Secy.; Paul Lisso, Treas. These, with E. Beuhler, constitute the first Board of Directors.

AMERICAN MIDLAND.—The American Midland Railway Co., with $60,000,000 capital stock and headquarters at Guthrie, Okla., was chartered on July 22 for the purpose of building a north and south line from Langdon, N. Dak., southward through the Dakotas, Nebraska, Kansas, Oklahoma, Indian Territory and Texas, to Galveston, a distance of 2,100 miles. Two branch lines are provided, one from Winnsboro, Tex., to Shreveport, La., the other from Coal Gate, Ind. T., to Poteau, Ind. T. The incorporators are: Henry Oppenheir, Frank Jerome, H. Meyer, Charles F. Senkowsky and Lamar Linden, all of New York; J. C. Cuss, Ben F. Hagler, Jr., and C. R. Hayinghorst, of Guthrie.

ATLANTIC & GULF TRANSPORTATION CO.—A charter has been granted in Texas to this company to operate in Orange, Jefferson, Chambers, Harris, Galveston, Brazoria, Matagorda, Jackson, Victoria, Calhoun, Refugio, San Patricio, Neuces and Cameron Counties. Capital, $10,000. The incorporators are Alfred A. Glasier, of Boston; J. P. Underwood, of Chicago, J. S. McNamara, C. A. Teagle and J. M. Conley, of Beaumont, Tex.

BEAUMONT & GREAT NORTHERN.—It is planned to build an extension from Livingston to Beaumont, Tex., 75 miles, when the present extension from Onalaska to Livingston is completed. C. J. Rogan is Gen. Supt., and C. A. Noblitt is Ch. Engr., at Onalaska, Tex.

CANYON CITY & NORTHWESTERN.—Incorporated in Texas with a capital of $100,000 to build a line from Canyon, Tex., northeast to Yarnell, in Carson County, about 36 miles. The general offices are at Canyon. The incorporators include C. T. Ward, L. G. Conner, J. M. Black, W. F. Weller, R. W. O'Keefe, D. M. Stewart, all of Canyon.

CHESTERFIELD & LANCASTER.—An extension will soon be built to either Concord or Charlotte, N. C., via Monroe. An extension of 20 miles from Ruby, S. C., has just been completed toward Charlotte. The company has also built its own line from Gopher to Cheraw, four miles, thus avoiding the use of the Seaboard Air Line tracks. A. G. Page is Supt., at Cheraw, S. C.

DAYTON, LEBANON & CINCINNATI TERMINAL.—This company has been formed by Frederick H. Goff, S. H. Tolles, John E. Morley, Charles H. Gale and Charles M. Buss, of Cleveland, Ohio, to acquire and operate the Dayton, Lebanon & Cincinnati, which was sold at receiver's sale on May 10. The new company has a capital of $1,000,000.

DELAWARE & HUDSON.—The sale of the Quebec, Montreal & Southern Railway to the Delaware & Hudson is officially announced. The Q., M. & S. at present extends from St. Lambert to Pierreville, Que., but work of grading to Quebec will be begun at once.

EUREKA HILL. — It is stated that this company has given a contract to BAXTER, STRAW & STOVE, of Provo, Utah, to build a 5-mile line from Silver City, Utah. C. W. Nibley is Pres., Salt Lake City; and R. B. West is Ch. Engr., Silver City.

GAINESVILLE & TEXAS SOUTHWESTERN.—Company has been organized for the purpose of building a railroad between Gainesville and Mineral Wells, Tex., a distance of about 80 miles, passing through the counties of Cooke, Denton, Montague, Wise, Jack, Parker and Palo Pinto. The general offices are at Gainesville. The incorporators are E. C. Bell, of Toledo, Ohio; E. M. Wickey, of East Chicago, Ind.; W. W. Newberry, of Chicago, Ill.; J. M. Lindsay and John King, of Gainesville.

GRAND TRUNK PACIFIC.—Contract for clearing the right-of-way on the Abitibi section of the Grand Trunk Pacific has been awarded to J. B. O'BRIEN, of Ottawa, Ont., who will at once start upon the work.

METTOWEE VALLEY. — Announcement was made on July 19 that arrangements have been completed for the construction of a new railroad line between Manchester, Vt., and Granville, N. Y. The new line will be about 25 miles long, and will connect at Manchester with the Rutland Railroad and at Granville, which is near the Vermont border, with the Delaware & Hudson system. The road will be known as the Mettowee Valley Railroad. The Mettowee Valley road will absorb the Manchester, Dorset & Granville Railroad, and will continue the line from South Dorset to Granville, through a rich freight and passenger region. The survey is now in progress. Casper L. Leach is Pres.

MOBILE, JACKSON & KANSAS CITY.—The M., J. & K. C. Co. will spend $1,500,000 in new equipment, and after the line is placed in first-class condition it will be extended from the present northern terminus at Middleton, Tenn., to the Ohio River.

MONONGAHELA COKE R. R.—This company has been chartered in Pennsylvania, with a nominal capital of $77,000. M. C. Milholland, 296 Fifth Ave., Pittsburg, is Pres. The company will build a line eight miles in length from the mining village known as Ten Mile to the Waynesburg & Washington Railroad at a point yet to be decided upon. The road is planned to tap the immense coal fields of the Pittsburg-Buffalo Co. and to form an air line to Pittsburg.

NEW YORK CENTRAL & HUDSON RIVER.—The WALSH CONSTRUCTION CO., of Davenport, Iowa, has been awarded a contract for 20 miles of double-track near Rochester, N. Y. W. L. Purcell is Engr.-in-Charge.

NEW YORK, NEW HAVEN & HARTFORD.—Preliminary plans are being prepared for double-tracking the Highland division of the New Haven between Vernon, Conn., and Willimantic, according to the New York "Commercial." The necessary surveys are under way. One plan contemplates a new route between Manchester and Andover by diverting the present line to the south and by tunneling Box Mountain, in the town of Bolton, Conn. It would shorten the present route by several miles and eliminate the present heavy grade. The one thing that will prevent adoption of the plan is the cost, which may prove to be prohibitive. With the exception of a fraction over 19

miles between Vernon and Willimantic, the Highland division is already double-tracked east of Hartford, and the extension of the double track west to Waterbury is well advanced. Still further west the section running from Hawleyville through Danbury to Hopewell Junction, N. Y., has been double-tracked. It is the desire of the management to provide the entire division with a double track for the development of its traffic, especially as a freight line.

OREGON.—Citizens of Sumpter, Ore., have decided to raise $10,000 toward the construction of a road from that place to Bourne, seven miles, and desire to call the attention of capitalists to the opportunity for a profitable investment. The estimated cost of building to Bourne is $133,000, and the cost of building to Cable Cove, 13 miles from Sumpter, is placed at $247,000. The tonnage over the Bourne route is figured at $40,095 annually, and over the Cable Cove route at $96,075.

PACIFIC & EASTERN.—George Estes, Gen. Mgr., Medford, Ore., advises us that the P. & E. Ry. Co. proposes to build a line from Blue Ledge, Siskiyou County, Cal., to Crater Lake, Klamath County, Ore., 100 miles. Eleven miles have been constructed and are now being operated. Surveys for remainder of the railway are being made, right-of-way for which is partly secured. Company does its own construction work. W. Cooper Morris, care of the Oregon Trust and Savings Bank, Portland, Ore., is Pres. G. W. Donnell is Ch. Engr., Medford, Ore. Noted on June 6.

PEOPLE'S RY.—The People's Railway Construction Co., recently chartered to build a railroad from Tyler to Canton, about 38 miles, has elected the following officers: Ben B. Cain, of Tyler, Pres.; John Durst, Tyler, First Vice-Pres.; D. F. Clark, of Canton, Second Vice-Pres.; T. B. Butler, Tyler, Secy. and S. Bruck, Treas. Concerning this railway, Mr. Cain informs us that this company has been chartered and has surveyed a line from Tyler to Canton, and has secured right-of-way, depot grounds and donations. "The company's plan is to have the citizens residing along this line subscribe to the capital stock to a sufficient extent to begin construction, and probably build from ten to 20 miles, and using this constructed road as a basis, finance the balance of the line." The road from Tyler to Canton will be one section of an air line from Dallas to New Orleans, which line will doubtless be built as soon as the railroad situation shall have adjusted itself. The section from Tyler to Canton can be cheaply constructed, so far as grading and bridges are concerned, and traverses a territory which will pay well from the beginning." M. J. Howe, of Tyler, is Ch. Engr. The surveyed line from Tyler to Canton is 38½ miles. Contracts will be let about Aug. 15.

QUEBEC, MONTREAL & SOUTHERN.—See Delaware & Hudson.

SHAWNEE CENTRAL.—The officers of this company, recently chartered to build from Shawnee, Okla., northeast to Muskogee, Ind. T., and southwest to Childress, Tex., some 300 miles, are: Pres., J. A. Aydelotte; Vice-Pres. and Gen. Mgr., C. J. Benson; Second Vice-Pres., G. H. Kerfoot; Treas., J. W. Rubey; Secy., Sidney J. Roy, all of Shawnee, Okla. As previously noted, Mr. Roy has advised us that this company will build a line 75 miles long from Shawnee to Muskogee in Okmulgee County, following the North Fork of the Canadian River. About 50 miles of survey has been completed and right-of-way has been secured. Contracts will be let when survey has been completed. F. H. Peckham, Shawnee, is Ch. Engr.

TAYLOR, SOMERVILLE & GULF.—Company has been organized with a capital stock of $100,000 for the purpose of building a railroad between Taylor and Somerville, Tex., a distance of about 60 miles, passing through Williamson, Milan and Lee counties. The general offices are at Taylor. The incorporators are: J. A. Thompson, T. W. Marse, R. C. Briggs, John F. Black, Howard Bland, W. R. Hoxie, A. A. Wheatley, J. R. Lyon, R. E. B. Bledsoe, Charles Parke and J. A. Jones.

TECOLOTE VALLEY.—Company has finished surveys, and will let bids about Sept. 1 for its proposed narrow-gage line from Las Vegas, N. Mex., north via Mineral Hill mining district, passing within five miles of Mora, the county seat of Mora County, to Black Lake, thence west to Taos, about 80 miles. All of this, with the exception of 22 miles, will be in the mountainous section, and will necessitate the piercing of a number of tunnels. At Las Vegas the company's shops will be built, and a line is projected from that point south to the Tecolote mining district. Frank J. Buck is Ch. Engr., Elizabethtown, N. Mex. The offices of the company are at Las Vegas.

WESTERN PACIFIC.—Contracts for construction work in San Francisco and Oakland, Cal., have been let by the Western Pacific Co., the first to HEALY-TIBBETTS CONSTRUCTION CO., San Francisco, for $700,000, the second to the WESTERN STATES CONSTRUCTION CO., for $1,000,000. The Western States Construction Co., of which H. A. Whitely is the active head, is to grade the section from 25th St. in the Potrero District, where it touches Islais Creek north and northwesterly to the corner of Ninth and Brannan Sts., in San Francisco. On this route one short tunnel will have to be bored through the Potrero hills. The Healy-Tibbetts Co. is to build a freight slip and a passenger slip on the Oakland water front adjoining the north wall of the Oakland estuary and dredge them to the proper depth. The company will also prepare the foundations for the freight and passenger structures to be used in connection with the slips. In addition it is to finish the filling in of the mole, which is to be 1,000 ft. wide and 1,000 feet in length, and is to complete everything in connection with the mole except to lay the tracks on it and build the passenger and freight structures. V. G. Bogue, Safe Deposit Bldg., is Ch. Engr. of the Western Pacific.

ELECTRIC RAILWAYS.

BAR HARBOR, ME.—Robert Amory, Secy. of Bd. of Directors of the Mount Desert Transit Co., Bar Harbor, advises us that construction contracts probably will be let this fall for building the proposed line from Ellsworth to Bar Harbor and Southwest Harbor, Me., about 40 miles. Surveys are now in progress. Right-of-way has not been secured yet. John S. Kennedy is Pres., 31 Nassau St., New York. W. E. Baker & Co., 27 William St., New York, are Engrs.

PORTLAND, ME.—The Portland, Gray & Lewiston R. R. Co. has been incorporated in Maine to connect Portland and Lewiston, passing through Falmouth, Gray and New Gloucester and thence to Auburn. The capital stock is $150,000. The shareholders are Edward W. Gross, of Auburn; Charles C. Benson, of Lewiston; Lewis A. Goudy, of Portland; John D. Clifford, of Lewiston; William M. Sturgis and N. D. Sturgis, of Scranton, Pa.; Tracey W. Holland of Brooklyn, N. Y. The principal stockholders of this company are the same ones that have subscribed for the stock of the Portland & Northern Railroad Co., which is to run from Portland to Bridgton and Naples. Regarding the latter line we were recently advised by Llewellyn Barton, Portland, that the Portland & Northern R. R. Co. which was lately incorporated to build an electric railroad in and through the cities of Portland and Westbrook and the towns of Windham, Raymond, Casco, Naples and Bridgton, Cumberland County, had begun surveys and had secured part of the right-of-way. Construction will be all new work. It will be a standard gage line, 40 miles long. Capital stock is $160,000. Howard Winslow, Portland, is Pres.; Ray W. Philips is Ch. Engr., Portland. Noted on May 30.

NEW HAVEN, CONN.—The House of Representatives has passed the bill providing for an extension to the Consolidated Railway Co. of two years in which to build or begin construction on all the lines in the state for which it has charter rights. The bill ratifies the right of the Consolidated Co. to build over 500 miles of electric lines in the state. J. H. Punderford is Gen. Mgr.

CORRY, PA.—We are officially informed that the Corry & Columbus St. Ry. Co. plans to build an extension from Columbus to Bear Lake, Pa., and Panama, Blockville and Ashville, N. Y., about 15 miles in length. Contracts will not be let this year. C. P. Northrup is Pres. and Gen. Mgr. at Corry.

ALTOONA, PA.—Frank G. Patterson, Pres. of the Altoona, Hollidaysburg & Bedford Springs Ry. Co., 427 Fourth Ave., Pittsburg, has announced that company will let contracts soon for extensions to its line. This railway will connect Altoona, Eldorado, Beryl, Hollidaysburg, Duncanville, McKees, Roaring Springs, Woodbury, Loysburg, Everett, Mt. Dallas, Bedford and Bedford Springs. H. C. Givin is Ch. Engr., Altoona.

ROSSVILLE, GA.—The Tennessee & Georgia Interurban Railway Co. has been chartered in Georgia. It will run from Rossville, Ga., to Catoosa Springs, 25 miles, via Ringgold. Capital stock $500,000. Incorporators are James C. Bryan, James L. Jones, W. E. Biggers, J. T. Robinson, J. W. Clark, W. E. Mann and M. W. Murphy, of Ringgold, Ga.; S. W. Divine, Dodge, Ga.; and W. H. Paine, Jr., Chattanooga, Tenn.

AMERICUS, GA.—The Americus Railway & Light Co. has applied for a charter, franchise having been granted. The incorporators are A. W. Smith, G. M. Eldridge, J. G. Dodson and W. A. Dodson, all of Americus, Ga.; E. B. Lewis, of Montezuma, Ga.; J. F. Lewis, of Valdosta, Ga.; E. G. Whiteford, of Scranton, Pa.; H. Burd Cassells and Howard Cassells, of Marietta, Pa.; and A. N. Walker, of Philadelphia, Pa. Line to be four miles long in this city.

ATLANTA, GA.—The Atlanta & Carolina Construction Co., capital $5,000,000, it is reported, will build a line from Atlanta to Augusta, Ga., 160 miles. Surveys have been made between Atlanta and Conyers, Ga., and also between Athens and Augusta. James W. English, Sr., of Atlanta, is Pres.; Mathew Mason, Vice-Pres., and M. T. Edgerton, Secy. Surveys have been completed between Atlanta and Conyers and between Athens and Augusta. It is said ground will be broken next October.

EATONTON, GA.—The Eatonton Board of Trade will make active effort to secure steam or electric railway connection with Madison.

NEW IBERIA, LA.—The Bayou Teche Railway & Light Co. is reported to have completed survey from New Iberia to Jeanerette, La. C. W. Reynolds is Ch. Engr., and H. R. Fine, Vice-Pres.

PASCAGOULA, MISS.—It is reported that Martin Turnbull, of Pascagoula and others are interested in a plan to build an interurban electric railway between Pascagoula and Mobile, Ala., a total distance of about 38 miles, but much of which may be covered by the use of existing lines.

CLARKSDALE, MISS.—The Clarksdale, Coilierville & Covington Interurban Railway Co. has applied for charter at Memphis, Tenn., in connection with the plans of the Lakeview Traction Co., which is to build a line connecting Memphis and Clarksdale. The incorporators are R. F. Tate, Pres.; H. E. Craft, Vice-Pres.; W. E. Willett, Gen. Mgr., all of Memphis; and C. F. Farnsworth, A. Walsh, W. A. Gage, Lewis Sambucetti, R. R. P. Neghut, D. S. Weaver, Walter Goodman, W. A. Percy, James S. Robinson, I. D. Block, M. J. Roach, E. Manigan, W. G. Knight, G. W. Agee and H. D. Minor.

MAYFIELD, KY.—The city recently sold a railway franchise at auction, the purchaser being J. W. Williams, of this city, for $200. The line is to be built at once. It is said that the line will be an electric railway line from Mayfield to Paducah. Mr. Williams represented capitalists from Paducah and other places.

CHICAGO, ILL.—Walter A. Osmer, Ch. Engr., of the Indianapolis, Logansport & Chicago Ry. Co., Logansport, Ind., advises us that negotiations are pending for construction of this line. The projected route is from Chicago to Logansport, Ind., south through Young America, Russiaville, Kempton and Sheridan to Indianapolis, 68 miles. E. N. Talbot is Pres., Baltimore, Md. Surveys have been made. Right-of-way is nearly all secured. Motive power will be steam and electricity.

JOLIET, ILL.—The Joliet & Southern Traction Co. may extend its line to New Lenox and to Chicago. L. D. Fisher, Joliet, is Ch. Engr.

STAUNTON, ILL.—The Madison County Interurban Belt Ry. Co. has been incorporated in Illinois, with headquarters at Highland. Capital stock, $25,000. The railroad is to be constructed from Staunton, Macoupin County, south to Williams, Madison County, thence east to New Douglas, thence south to Grant Fork, south to Highland, west to St. Jacobs, southwesterly to Troy and west to Collinsville, Madison County. The incorporators are: W. P. Wall, John Bardill, John Gehrig, John Wildi and J. L. Rhein.

FORT MADISON, IOWA.—We are officially informed that the Mississippi Valley Elec. R. R. Co. has let contract to the FEDERAL CONSTRUCTION CO., 115 Broadway, to build and equip its line. It will run from Fort Madison to Keokuk, Iowa; Hamilton, Nauvoo and Carthage, Ill., 42 miles. Surveys are made and right-of-way and capital are obtained. Major W. A. Calhoun, 115 Broadway, New York, is Ch. Engr.; T. R. Smith, Nauvoo, is Resident Engr.; J. P. Madigan, Cleveland, Ohio, is Pres. Grading work will start about Aug. 1. Senator O. F. Berry, of Carthage, is chairman of this right-of-way committee and will be assisted by Judge Mack of Carthage; R. R. Wallace, of Hamilton; and George H. Hart, of Nauvoo.

MANKATO, MINN.—W. L. Hixon, Mankato, Pres., writes us that contracts will be let immediately for constructing about six miles of new railway in Mankato for the Mankato Electric Traction Co. Work on surveys has been completed and right-of-way and capital for construction have been obtained. Fred. Kron is Vice-Pres.; W. D. Willard is Secy. and Treas.; H. E. Hance is Supt. Noted on May 23.

JOPLIN, MO.—The State Charter Board has granted a charter to the Joplin & Pittsburg Railway Co., a new company with a capital of $5,000,000, which proposes to build an interurban electric line connecting Joplin, Mo., Pittsburg, Columbus and other towns in Kansas. The company has purchased the Pittsburg Railway & Light Co.'s plant. The incorporators are: Joseph J. Heim and John A. Prescott, Kansas City, Mo.; Fred. F. Fitch, Pittsburg, Kan.; J. W. Ground, Carthage, Mo.; H. W. Noble, Detroit, Mich; Thomas K. Irwin and W. W. Calhoun, Carthage, Mo.; D. L. Robinson, Buffalo, N. Y.; R. E. Richardson, Edward C. Wright and C. G. Hutcheson, Kansas City, Mo.

AUSTIN, TEX.—The Texas Interurban Co. has filed its charter to build a system of interurban electric railways with Austin as the center. It has a capital stock of $400,000. The incorporators are Thomas Moore, of Elizabeth, N. J.; Ephraim Miller, of White Plains, N. Y.; Henry M. McKay, of Hempstead, L. I., N. Y.; C. P. Scrivener and S. M. Posey, of Austin. It is announced by the company's representatives that it will soon begin the construction of an interurban line to run from Austin to Lockhart, a distance of about 30 miles. The survey for the proposed road has been made and the right-of-way obtained for most of the distance.

TULSA, IND. T.—J. Robert Bernham, C. E., Box 152, Tulsa, is reported as being interested in the construction of an electric railway, 25 miles long, from Tulsa to the Glen Pool oil fields.

SAPULPA, IND. T.—The Business Men's League is reported to have closed an agreement with E. C. Reynolds and associates to build an electric railway to oil fields southeast, including a street railway in Sapulpa. Work to begin in 60 days. Some machinery has been ordered.

CANON CITY, COLO.—The Canon City, Pueblo & La Junta Railway & Power Co. will at once commence the work of building and equipping an electric interurban railway which will extend from Canon City to the Kansas state line. The following officers were recently elected for the ensuing year: Alfred E. Bent, of Lamar, Pres.; Andrew J. Behymer, of Elwood, Ind., Gen. Mgr.; Geo. D. Kendall, of Pueblo, Secy.; Charles R. Buckey, of La Junta, Asst. Secy.; F. E. Pastorius, of Colorado Springs, Treas. Noted last week.

VALLEJO, CAL.—The San Francisco "Chronicle" states that "L. J. Perry, Mgr. of the Vallejo, Benicia & Napa Valley R. R. Co., is authority for the statement that this road is to construct an electric line into the city of Sacramento, making the Napa branch a feeder. The termini will be Vallejo and Sacramento. The new road will leave the Napa route at a point near Napa junction and will follow the Southern Pacific track to Cordelia and Suisun, and from that city will take a short cut to Sacramento. To keep up with the Southern Pacific Co. in the proposed improvements of the service in this section of the state, it is understood that the Hatch Bros. Co., the Vallejo and Napa Interurban Electric Road Co. and the San Francisco, Vallejo and Northern Electric Road will combine and build one or more steamers to cost in the neighborhood of $250,000. The new steamers will be able to carry over 2,000 people and will travel between this city and San Francisco in less than 90 minutes."

LIGHT AND POWER PLANTS.

(* *denotes that this work is advertised in Engineering News.*)

WATERVILLE, ME.—J. L. PARKIN & SON have been awarded the contract to build a dam across the Sebasticook River about 800 ft. north of the Winslow bridge by the Fort Halifax Power Co. The firm will build a complete power plant to furnish power to the Augusta & Waterville Electric R. R. The dam will be [illegible] ft. long and 21 ft. high. Noted on July [illegible].

WRENTHAM, MASS.—We are officially advised that the citizens of this town will hold a second election on the question of establishing a municipal electric light plant here. D. T. Stone is Town Clerk.

NEW YORK, N. Y.—Bids will be asked until 2.30 p. m., Aug. 5, by Robert W. Hebberd, Comr. of Charities, for conduiting, electric wiring, and all other work in connection with installation of an electric lighting and power system for all the buildings and grounds under the jurisdiction of the Department of Public Charities, and comprising the Metropolitan Hospital District, Blackwell's Island, Boro. of Manhattan.

NEW YORK, N. Y.—The following bids were received July 22 by the Department of Public Charities for (a) providing all labor and materials required for the electrical conduit electric wiring and switchboard work, heating work, plumbing work, gas piping, and all other work (except tearing down and removal, excavation and masonry, steel and iron, roofing and metal work, carpentry, gas and electric fixtures and fitting up) for the erection and entire completion of a day room for male inmates and a day room for female inmates, a reception pavilion for male inmates, and a reception room for female inmates, and an operation pavilion in connection with the Home for the Aged and Infirm, Blackwell's Island; (b) for providing all labor and materials required for the gas and electric fixtures and fitting up, and all other work (except tearing down and removal, excavation and masonry, steel and iron roofing and metal work, carpentry, and electric, heating and plumbing work) for the erection and entire completion of a day room for male inmates and a day room for female inmates, a reception pavilion for male inmates and a reception room for female inmates, and an operation pavilion in connection with the Home for the Aged and Infirm, Blackwell's Island, the City of New York: Wells & Newton Co., Avenue B and 17th St., (a) $37,045; Kelley & Kelly, Inc., 45 East 42d St., (a) $42,070, (b) $4,065.

Bids are asked until 2.30 p. m., Aug. 15, by Robert W. Hebberd, Comr. Public Charities, for all materials and labor required for complete conduiting, electric wiring, and all other work in connection with the installation of a complete electric lighting and power system for all the buildings and grounds under the jurisdiction of the Department of Public Charities, and comprising the City Hospital District, Blackwell's Island, Boro. of Manhattan.

NEW YORK, N. Y.—Bids are asked until 3 p. m., Aug. 5, by C. B. J. Snyder, Supt. of School Bldgs., for installing electric equipment of additions to and alterations in Public School No. 129, north side of Gates Ave., 275 ft. west of Stuyvesant Ave., Boro. of Brooklyn.

SCHENECTADY, N. Y.—The Mohawk Gas Co. will construct a gas plant on Villa Road. The plant will consist of an additional gas holder, oil tanks, engine house, boiler house, purifier house and generator house.

DUNKIRK, N. Y.—The Water Commissioners have awarded a contract for a 500-KW. turbo-generator for the water-works and electric light plant, to the ALLIS-CHALMERS CO., of Milwaukee, the lowest bidders, at $19,500. The company made concessions as to the foundation and other appurtenances in connection with the installation. L. N. Murray is City Clk. John S. Coleman is Supt.

BIRDSBORO, PA.—At a recent meeting of Town Council a 5-year contract for lighting the borough streets is reported to have been awarded to the BIRDSBORO ELECTRIC CO. The terms of the contract are the same as the former one. L. W. Weidel, Birdsboro, is Supt.

BUCHANAN, VA.—The James River Water Power Co., lately incorporated with a capital stock of $500,000, is reported to be preparing to begin construction of its proposed water-power electrical plant at Little Tunnel, on the James River, six miles west of Buchanan. A fall of 60 ft. is available, and the dam will be constructed there if State permission is granted. Lands and riparian rights have been secured for the proposition and electricity will be transmitted to various cities and towns, including Buchanan, Clifton Forge and Roanoke. O. C. Huffman, of Buchanan, is interested.

HICKORY, N. C.—Bids are asked until 3 p. m., Aug. 10, by M. E. Thornton, Hickory, for constructing a concrete rock reinforced dam with power house, across the Catawba River, at Hickory, and installing 3,000-HP. turbine water-wheels and electrical apparatus and transmission lines for lighting and power purposes.

NEWBERN, N. C.—The city will expend about $14,000 in purchasing an incandescent dynamo, engine and other equipment for electric-light plant. C. F. Watson, Newbern, is Mgr.

CALHOUN, GA.—The city has voted affirmatively the issuance of $12,500 of bonds for establishment of electric light plant. W. L. Hillhouse is Mayor.

MACON, GA.—A contract calling for the expenditure of $50,000 has just been let by the Central of Georgia Ry. Co. to the WESTINGHOUSE ELECTRIC & MFG. CO., Westinghouse Bldg., Pittsburg, Pa., for equipping the new shops in Macon. The appliances needed to furnish the power for the plant will consist of turbines, generators, rotary con-

verters, transformers and motors and the installation of the system will require no little time and skill. The shops are to be run by electricity as much as possible and the work of placing the apparatus in position will begin as soon as the shops have reached a certain point in construction.

LAKE CITY, FLA.—It is contemplated to develop the water-power of the Suwanee Falls, on the Suwanee River, near Lake City. It is proposed that the power be transmitted by electricity for industrial service, including the operation of a cement plant which it is proposed to build in connection with the water-power project. J. D. Carley is owner of the power.

CINCINNATI, OHIO.—John W. Hill, Engr. is revising plans for the proposed development of the Miami River, according to press reports. The work will include building 14 dams and will cost about $1,500,000. It is planned to use 32 miles of the Miami River, the flow over the 14 dams averaging 32,000 cu. ft. a minute. Mr. Hill is revising certain mechanical features which will make it possible to deliver to the consumer 83% of the energy per estimated horse power at the dams, which is considered about the maximum.

TOLEDO, OHIO.—It is proposed to improve the artificial gas plant and the Yaryan heating system, belonging to the Toledo Railways & Light Co. L. E. Beilstein, Toledo, is Gen. Mgr.

FORT WAYNE, IND.—We are officially advised that the bids received June 24 for constructing a municipal light and power plant here were not all rejected, as reported in a previous issue. Contracts were awarded as follows: To the P-K. ENGINEERING CO., Chemical Bldg., St. Louis, Sections 1 and 5, boilers and equipment and stock connections, feed water heater, boiler feed pumps, separators, pipe work and connections, $19,220; to FORT WAYNE ELECTRIC WORKS, Fort Wayne, Ind., Sections 3, 4, 7, 8 and 10 steam turbine generators and exciters, condenser equipment, arc lamp transformers, switchboard, appliances and station electrical work, arc lamps, transformers and connecting public buildings (this equipment includes the new magnetite lamps and rectifier system), $73,889; to ALPHONS CUSTODIS CHIMNEY CONSTRUCTION CO., 204 Dearborn St., Chicago, Section 2, stack, $4,400; to McBRIDE ELECTRIC CO., 346 Minnesota St., St. Paul, Minn., Sections 9 and 11, pole line and wiring system and underground work (distribution system) and power station and coal storage, $56,002; to MOELLERING CONSTRUCTION CO. of Fort Wayne, Ind., Section 12, dam in Spy Run, $1,338. Section 6, being alternative section on producer gas power plant and corresponding equipment not adopted—steam turbines being adopted as above. Total contract price, $154,759. Owen Ford is Consult Engr., 710 Security Bldg., St. Louis, Mo.

LAWRENCE, IND.—We are officially advised that contract has been let by Capt. George H. Penrose, Q. M., Fort Benjamin Harrison, for erection of an electric plant, lighting fixtures, transformer sub-station, etc., to the SANBORN-MARSH ELECTRICAL CO., 115 North Illinois St., Indianapolis.

GARY, IND.—The contract for furnishing gas and electrical fixtures for an office building and 255 residences in the new Indiana city of Gary, for the Indiana Steel Co., the Rookery, Chicago, has been secured by G. H. WHEELOCK & CO., of South Bend, Ind.

HANCOCK, MICH.—We are officially advised that the plans prepared by E. T. Sykes, Minneapolis, Minn., for proposed municipal electric light plant, have been set aside, as the city has extended its present lighting contract for five years.

KAUKAUNA, WIS.—It is reported that an electric power plant with a capacity of 2,000 to 3,000 HP. is to be built by the Green Bay & Mississippi Canal Co. at Kaukauna. The power will be transmitted to cities with a radius of 100 miles.

ORANGE CITY, IOWA.—The stockholders of the Orange City Electric Light Co. have decided to rebuild the plant which was destroyed by fire recently. The new building will be 40 ft. wide and 50 ft. long. It will be built of concrete and cement. A duplicate set of machinery will be installed. Work will begin at once. F. W. Michael, Orange City, is Mgr.

FORT LEAVENWORTH, KAN.—The contract for extending the electric light system at Fort Leavenworth has been awarded to the AMERICAN ELECTRIC CO., of St. Joseph, Mo., at $3,465.

SILVER CITY, N. MEX.—A. D. Coleman, of Albuquerque, N. Mex., is preparing plans for the Forest Power Co., for erection of an electric plant, transmission lines and electric railroad connecting Silver City with mining camps in the vicinity.

WEAVERVILLE, CAL.—Preparations are being made by the North Mountain Power Co. to construct a power plant in Trinity. It is reported 250,000,000 cu. ft. of water will be obtainable at all times of the year. H. L. Jackson and Henry Deering, Eureka, are interested.

SAN JOSE, CAL.—Articles of incorporation have been filed for the Donnels Flat Water & Power Co. The corporation is organized with a capital of $1,000,000. The principal place of business will be San Jose, the works being located in Tuolumne County. The articles of incorporation range from securing and holding water rights to construction and maintenance of electric railways and light and power plants. The Directors elected for the first year are William Bogen and L. E. Hanchet, of San Jose, and F. J. Koster, W. H. Metson and L. W. Smith, of San Francisco.

OROVILLE, CAL.—Press reports state that the work of developing the French Creek water power will be begun soon. Nearly four years ago an amount of money was spent in surveys, road building and in purchasing water rights, machinery, etc., with the object of establishing a power plant at French Creek, a tributary of the North Fork, about 28 miles from Oroville. The Pacific Gas & Electric Corporation, which is a merger of the Bay Counties Power Co., was interested in the proposition, and after preparatory work had been done the project was given up. The plant as originally proposed, was intended to generate from 16,000 to 20,000 HP., but the new project is said to be greater.

FLORENCE, ARIZ.—The Newberry Co. is to have an electric power plant on Gila River 16 miles east of Florence, with 300 HP.

SANDPOINT, IDAHO.—The City Council has passed an ordinance granting permission to the Pend d'Oreille Iron Works to establish, maintain and operate a system of gas works in Sandpoint.

OTTAWA, ONT.—The City of Ottawa has let a 10-yr. contract to the HULL ELECTRIC CO., at $15 per horse-power, for the supply of power to run the municipal plant. W. R. Baker, Montreal, Que., is Mgr.

CHATHAM, ONT.—The Municipal and Railway Board has permitted the submission of a by-law in Chatham for extension of the electric lighting plant at a cost of $15,000. E. R. Jones, Chatham, is Supt.

DURHAM, ONT. — The Northumberland-Durham Power Co. has secured the lease of Healy Falls from the Ontario Government. The rental will be $10 a year for the first two years, and thereafter 75 cts. per horse-power developed. The lease is for 20 yrs., and development work is to commence not later than Oct. 1. It is reported that 3,000 HP. is to be developed within the next three years.

TORONTO, ONT.—Work is being done on the survey of the proposed projects of the Hydro-Electric Commission. Adam Beck is Chn. of the Commission; P. W. Sothmann is Ch. Engr., Toronto.

RAYMOND, ALTA.—The town of Raymond will install an electric lighting system, and will make improvements on the water-works.

VICTORIA, B. C.—A power house will be erected at Victoria, B. C., in connection with the Canadian Pacific Railway hotel at an estimated cost of $40,000. Hayter Reed, Montreal, Que., is Mgr. of Hotels.

BRIDGES.

(denotes that this work is advertised in Engineering News.)*

WATERBURY, CONN.—Bids are asked by the Board of Public Works until 8 p. m., July 30, for constructing steel concrete bridge over Mad River at Liberty St. R. A. Cairns is City Engr.

LE ROY, N. Y.—The construction of bridge over Oatka River at Main St. replacing present structure, is contemplated. Estimated cost, $10,000.

HACKENSACK, N. J.—The Board of Chosen Freeholders of Bergen County awarded July 1 the contract for constructing Court St. bridge to F. R. LONG & CO., for $79,750.

CLARION, PA.—Bids are asked until July 30 by the County Commissioners for constructing substructure and superstructure of bridge across Clarion River at Mill Creek. H. M. Hufnagel is County Clk.

*READING, PA.—Bids are asked by H. F. Livingood, County Controller, until 10 a. m., Aug. 9, for erecting reinforced concrete arch bridge, to be known as Hamburg Bridge, across Mill Creek at State St., Boro. of Hamburg. The bridge to be constructed with 40-ft. clear span, having 8-ft. rise, with two abutments and four wing walls and all surmounted with parapet wall the entire length on each side.

WILLIAMSPORT, PA.—Bids are asked until Aug. 1 by the Board of County Commissioners, Frank L. Miller, Clk., for constructing stone bridge, 44-ft. span across Plunkett's Creek, near Proctorville; stone arch bridge, 26-ft., span, across Lick Run, Shrewbury Township; stone arch bridge, 22-ft. span, over Wolf Run, Muncy Township; concrete steel deck span across Tombs Run, Watson Township, 22-ft. span.

EBENSBURG, PA.—Bids are asked until July 30 by the County Commissioners at Ebensburg, for constructing concrete bridge 40 ft. long, over Conemaugh River at Portage; also concrete bridge 36 ft. long over Little Paint Creek, in Richland Township; all steel for said bridges to be furnished by the contractor.

WINSLOW, DEL.—WILLIAM H. SHONS has secured contract for constructing bridge across Pecatonica River, at Winslow.

ANNAPOLIS, MD.—The County Commissioners have let contract to WILLIAM H. BROWN, of the Fourth District, for constructing bridge across narrow stretch of the upper part of Severn River.

HAVRE DE GRACE, MD.—The Baltimore & Ohio R. R. Co. has awarded contract to the EYRE-SHOEMAKER CO., Inc., Philadelphia, Pa., for construction of substructure of proposed double-track bridge across Susquehanna River at Havre de Grace. Structure will be 7,000 ft. long, require about 45,000 cu. yds. of masonry in substructure, between 14,000 and 15,000 tons of steel in superstructure. Estimated cost, $2,000,000. The masonry work will consist of concrete abutment at west end and concrete pier on west bank, four intermediate piers in west channel, 21 concrete piers on Watson's Island and one pier in east channel. It is planned to double number of spans in west channel with exception of channel span of 520 ft.; intermediate spans will each be 240 ft. instead of 480 ft.; west span in east channel will be divided, using 258-ft. and 128-ft. spans, respectively. In steelwork west-approach viaduct will be replaced by two 100-ft. spans resting on solid piers and Watson's Island viaduct with 90-ft. plate-girder spans on solid piers. Foundations of three channel piers will be built by pneumatic or compressed air process and other by open-crib or cofferdam process. THE AMERICAN BRIDGE CO., 42 Broadway, New York, has secured contract for steelwork. D. D. Carothers Ch. Engr.; J. E. Greiner Asst. Ch. Engr., and A. M. Kinsman Engr. of Construction, all of Baltimore, Md., will supervise work.

WASHINGTON, D. C.—Bids were opened at the office of the U. S. Engineer, Washington, D. C., July 11, for reconstruction of Pier No. 1, Aqueduct Bridge, Washington, D. C., for (A) new pier; (B), concrete footing of new pier (C), removing masonry of old pier, (D), removing masonry, riffraff, debris, mud, etc., as follows: Penn Bridge Co., Bond Bldg., Washington, D. C., (A), $73,000; (B), $6.50 per cu. yd., (C), $4 per cu. yd.; (D), $4 per cu. yd.; if the time should be extended to Sept. 1, 1908, deduct $7,000. CHAS. McDERMOTT, 335 Delaware Ave., N. E., Washington, D. C. (A), $40,000; (B), $20 cu. yd.; (C), $3 per cu. yd.; (D), $9.50 per cu. yd. (awarded contract). Cranford Paving Co., 2620 E St., N. E., Washington, D. C. (A), $69,350; (B), $6.25 per cu. yd., or lump sum $810; (C), $3.50 per cu. yd. or lump sum $3,430; (D), $1.90 cu. yd. or lump sum, $2,907. Chas T. Eastman, Inc., 14 S. Broad St., Philadelphia, Pa., (A), $68,000; (B), $20 per cu. yd. or lump sum $2,400; (C), $2 per cu. yd. or lump sum $1,960; (D), $4 per cu. yd. or lump sum $6,120. The Foundation Co., 115 Broadway, N. Y., (A), $71,000; (B), $30 per cu. yd.; (C) and (D) included in (A).

DOBBIN, W. VA.—The contract for constructing bridge near Dobbin has been awarded to the YORK BRIDGE CO., of York, Pa.

JENNINGS, W. VA.—The YORK BRIDGE CO., of York, Pa., has secured contract for erecting bridge near Jennings.

NEWBERN, N. C.—Bids are asked until Aug. 5. by the County Commissioners, C. E. Foy, Chn., at Newbern, for constructing steel highway drawbridge over Swiff Creek at Vanceboro and also over Brices Creek near Newbern. Matthew & O'Brien, Wilmington, N. C., are Engrs.

GREENVILLE, S. C.—The Greenville Traction Co. will join city in building 3-arch concrete bridge across Reedy River. H. R. Fothergill is Gen. Mgr. L. P. Slattery is City Engr.

BESSEMER, ALA.—The Atlanta, Birmingham & Atlantic R. R. Co. has awarded contract for constructing bridges across various streets to the AMERICAN BRIDGE CO., 42 Broadway, New York.

MARIETTA, OHIO.—The County Commissioners have let contracts to the CHAMPION BRIDGE CO., Wilmington, Ohio, for erecting Limerick, Layman and Smith bridges. REICHELDERFER BROS., of Circleville, Ohio, have secured the contract for constructing Reppert, Hills and Schwenderman bridges.

CHILLICOTHE, OHIO.—Bids are asked by the County Commissioners until noon, Aug. 5, for constructing 30-ft. steel bridge, with 14-ft. roadway, on iron substructure incased in concrete. C. H. Pinto is County Audr.

ENTERPRISE, OHIO.—The contract for constructing steel superstructure across Hocking River at Logan-Lancaster Road, in Falls Township, has been awarded to the BROOKVILLE BRIDGE CO., of Brookville, Ohio, for $5,475. James L. Martin is County Audr.

WASHINGTON C. H., OHIO. — Bids are asked until August 3 by H. D. Chaffin, County Audr., for constructing iron bridge 84 × 14 ft. over Crompton Creek.

TIFFIN, OHIO.—Bids are asked by the County Audr. until July 30 for repairing Perry St. bridge. Estimated cost, $8,000.

JACKSON, OHIO.—Bids are asked until Aug. 5 by the County Audr. for constructing six concrete bridges.

NEW ALBANY, IND.—Bids are asked until Aug. 8 by the County Commissioners for constructing bridge across Big Indian Creek, between Lafayette and Greenville Townships. Thos. Hanlon is County Audr.

BRAZIL, IND.—Bids are asked by the County Commissioners until 11.30 a. m., Aug. 6, for construction of bridge across Eel River. James L. Burnes is County Audr.

SHELBYVILLE, IND.—Bids are asked by the County Commissioners until 10 a. m. Aug. 5, for repair of several bridges. Thos. Hawkins is County Audr.

INDIANAPOLIS, IND.—We are officially advised that the Board of City Park Commissioners has awarded contract to HILLIS F. HACKEDORN & CO., of this city, for construction of three reinforced concrete bridges in parks as follows: Garfield Park, 70-ft. span, $7,518; Brookside Park, 70-ft. span, $5,875; Spades Park, 60-ft. span, $2,549.

NEWCASTLE, IND.—The County Commissioners have let contract for constructing two bridges to the PAN-AMERICAN BRIDGE CO., of this city.

VALPARAISO, IND.—Bids are asked by the Board, Stephen P. Corboy, Audr. and Clk., until noon, Aug. 5, for constructing two bridges, one in Union and other in Pine Township and concrete arch in Westchester Township.

EAST ST. LOUIS, ILL.—Bids are asked by the Board of Local Improvements until noon, Aug. 1, for rebuilding the Broadway Viaduct in this city. W. J. Crocken is City Engr.

PEKIN, ILL.—The Council has awarded contract to BURNHAM & IVES for bridge work.

CLINTON, IOWA.—The Chicago & Northwestern Ry. Co. has awarded contract to the MILWAUKEE BRIDGE & IRON CO., Milwaukee, Wis., for constructing bridge across Mississippi River at Clinton.

MINOT, N. DAK.—The contract for constructing 60-ft. steel bridge over Canon Ballover has been awarded to the FARGO BRIDGE & IRON CO., of Fargo, for $2,490. Robert D. Berry is County Audr.

MITCHELL, S. DAK.—Bids are asked by the County Commissioners until Aug. 12 for constructing six bridges. H. B. Anderson is County Audr.

ST. LOUIS, MO.—It is understood that the Illinois Traction Co. will not consider contracts for proposed bridge and terminal improvements until further arrangements regarding approaches have been completed. The company's plans include establishment of general terminal facilities and bridge across Mississippi River. The bridge to be 2,365 ft. long from shore to shore, with three central spans, 521, 523 and 521 ft. in length, respectively, and two smaller spans, each 300 ft. in length; height of bridge above low water, 75 ft. The train part will carry double track for electric car service; outside of trainway will be constructed, on either side of steel superstructure, a wagonway and sidewalk. Each wagonway will be 14 ft. wide and each sidewalk seven feet wide. The bridge will cost about $2,500,000. As soon as contracts are let for bridge awards will be made for laying tracks in St. Louis. All improvements, including the bridge and land bought, will cost about $5,000,000. The company contemplates erecting passenger station three stories high, at a cost of about $200,000. Freight depots, yards and passenger depots will also be built. William B. McKinley, of Champaign, Ill., is Pres. The St. Louis Electric Bridge Co., 410 Bank of Commerce Bldg., St. Louis, will own and operate the bridge. R. D. Smith is Supt. Ralph Modjeska, of Chicago, is Engr.

VAN BUREN, ARK.—The Fort Smith Light & Traction Co., Fort Smith, Ark., is considering erection of bridge at Van Buren. R. H. Mitchell is Local Mgr.

WRIGHTSVILLE, ARK. — CHARLES CRAWFORD has secured contract for constructing 144-ft. wooden bridge near Wrightsville.

DALLAS, TEX.—The County Commissioners have let contract for constructing two steel bridges, Maple Ave., to AUSTIN BROS., 404 Trust Bldg., Dallas.

FORT WORTH, TEX.—Bids are asked until July 29 by C. J. McKenna, County Audr., for reconstructing 30-ft. steel bridge with 12-ft. roadway, resting on solid concrete walls, with 6-ft. wing walls on each side, over Rocky Branch, about nine miles from Ft. Worth.

GUTHRIE, OKLA.—The City Council has under consideration construction of concrete bridge on Fifth St., with 100-ft. arch; also steel bridge at Ninth St. with 140-ft. span. W. W. Miller is City Engr.

PORT ORCHARD, WASH.—The County Commissioners have rejected all bids received for constructing bridge at Browns Bay. New bids are being received.

ELGIN, ORE.—The contract for constructing bridge near Elgin has been let to the T. S. ESTERDAY CO., of Walla Walla, Wash., for $4,884.

LOWELL, ORE.—Bids are asked by the County Commissioners, E. V. Lee, Clk., until 10 a. m., July 29, for erecting bridge across middle fork of Willamette River, at or near Lowell.

LOS GATOS, CAL.—The Board of Town Trustees has awarded contract for constructing two cement culverts across Massol Creek, at Tait and University Aves., to S. R. REMINGTON.

WOODLAND, CAL.—Plans and specifications for constructing reinforced concrete bridge over Putah Creek, as advertised, are on file at office of Engineering News, New York. Bids are asked by the clerks of Yolo and Solano Counties, at Woodland and Fairfield, until Aug. 1. C. F. Hadsall is Clerk of Yolo County.

ST. JOHN, N. B.—Plans are being prepared for replacing suspension bridge across St. John River with cantilever bridge.

BELLEVILLE, ONT.—Bids are asked until July 26 for constructing two highway bridges. Each bridge will be 94 ft. long, 16 ft. wide, with reinforced concrete floor on steel joists. Wm. R. Aylesworth is County Clk.

BUILDINGS.

(denotes that this work is advertised in Engineering News.)*

*STONINGTON, CONN.—Bids are asked until 1 p. m., Aug. 15, by the Light-House Engineer, Tompkinsville, N. Y., for erecting a keeper's dwelling at Stonington Breakwater Light-Station, Conn.

BANY, N. Y.—Bids are asked by Dr. Andrew S. Draper, State Comr. of Education, Capitol, Albany, until noon, Aug. 15, for the construction of the New York State Normal College at Albany, N. Y., including heating, plumbing, electrical work and gas-piping. George L. Heins, Capitol, Albany, is State Arch. Only bids for the complete work will be considered.

ITHACA, N. Y.—The following are the bids opened on July 1 at the office of James Knox Taylor, Superv. Arch., Treasury Department, Washington, D. C., for construction, including heating apparatus, plumbing, gas piping, electric conduits and wiring, of the U. S. post-office at Ithaca: The Clemence Construction Co., Syracuse, $109,859, and Fissell & Wagner, 1133 Broadway, New York, $101,978.

NEW YORK, N. Y.—A project is under consideration to erect a clubhouse in this city for six New England colleges. The colleges included are Brown, Dartmouth, Amherst, Williams, Wesleyan, and the Massachusetts School of Technology. The building as contemplated will have eight or nine stories. The first two or three will be for the general use of all members. There will be a dining room, billiard and smoking rooms, bowling alleys, squash courts, and all the requisites of a well-appointed club. The six upper floors will be for the use of the different colleges, each having a floor to itself. There will be an assembly room and sleeping apartments. Allston Sargent is Secy. of the Massachusetts School of Technology Club.

NEW YORK, N. Y.—The following bids were received on July 22 by C. B. J. Snyder, Supt. School Bldgs., for the general con-

struction, etc., of additions to and alterations in Public School No. 4, on Rivington, Pitt and Ridge Sts., Boro. of Manhattan: Thomas Cockerill & Son, 147 Columbus Ave., $207,500; T. J. Waters, Park Ave. and 125th St., $267,500; H. M. Weed & Co., 124 West 45th St., $228,000; Richard E. Henningham, 1 Madison Ave., $209,485; Patrick Sullivan, 230 Grand St., $218,400; Patrick Gallagher, 1183 Broadway, $208,850; Edmund D. Broderick, 1382 Lexington Ave., $197,900; A. L. Guidone, 1 Madison Ave., $204,350; J. L. Moreland, 1910 Park Ave., $198,980; Bottsford Dickinson Co., 1170 Broadway, $196,000.

Bids were received at the same time for (a) installing heating and ventilating apparatus in new Public School No. 12, on the corner of Madison and Jackson Sts., Boro. of Manhattan, and (b) for installing heating and ventilating apparatus in new Public School No. 88, on Elm Ave., Fresh Pond road and Halsey St., Fresh Pond, Boro. of Queens: E. Rutzler & Co., 127 White St., (a) $63,690; Walker & Chambers, 50 East 20th St. (a) $63,985; Frank Dobson Co., 319 East 53d St. (a) $69,698, (b) $36,900; James Curran Mfg. Co., 512 East 36th St. (a) $62,761; William J. Olvaney, 177 Christopher St. (a) $71,348 (b) $40,940; Blake & Williams, 211 West 20th St. (a) $60,492, (b) $36,238; R. J. Sovereign, 63 Fifth Ave. (b) $38,750; G. A. Sutter, New York (b) $36,238.

NEW YORK, N. Y.—The following bids were received on July 22 by the Department of Public Charities for tearing down and removal, excavation and masonry, steel and iron, roofing and metal work, carpentry, glazing, painting, hardware, and all other work (except electric, heating and plumbing work, gas and electric fixtures and fitting up) for the erection and entire completion of a day room for male inmates and a day room for female inmates, a reception pavilion for male inmates and an operation pavilion in connection with the Home for the Aged and Infirm, Blackwell's Island, New York: Daniel J. Ryan, 723 Third Ave., Brooklyn, $130,886; Kelley & Kelly, Inc., 45 East 42d St., N.Y.C., $119,961; Thomas B. Leahy Building Co., 5 East 42d St., $150,695. For results of bids for electrical work, see under Light & Power Plants.

NEW YORK, N. Y.—Plans have been filed for a 7-story residence to be built for Mrs. James Roosevelt at 47 and 49 East 65th St. It will have a frontage of 35 ft. and a depth of 77.9 ft. and will be of Colonial design, the facade being of limestone at the first story and ornamental brick above, with a central entrance and a decorative cartouche in the center at the fourth story. The interior will be modeled as twin dwellings, with a fireproof wall separating them, and having individual entrance halls and apartments of like design for each dwelling. The building is to cost $125,000. Charles A. Platt, 36 East 20th St., is Arch.

The following bids were received by the Armory Board on July 15, for excavation and removal of rock and other material from the site of the proposed armory for the 22d Regiment Engineers, Fort Washington Ave., 168th and 169th Sts., Boro. of Manhattan: Thomas Crimmins Contracting Co., 444 East 69th St., $84,400; C. W. Collins, 5189 Broadway, $60,000; Patrick Reddy, Lenox Ave. and 111th St., $93,000; I. Fagins, New York, $68,500.

NEW YORK, N. Y.—Plans for the New York Law School building, to be erected at 172 and 174 Fulton St. call for an 11-story structure, with an exterior of classic design. The upper and lower stories will be of limestone, while the intermediate stories will be of Harvard brick, with limestone trimmings. The ornamentation of the upper part of the building will consist of limestone columns and pilasters and window balconies. There will be one basement. The vestibule and main entrance hall will be wainscoted in marble with pilasters of the same material. There will be no frescoing in the building. The main floor will be equipped for banking purposes, and the second floor to the seventh inclusive will be furnished as offices for renting purposes. The part reserved for the law school begins at the eighth floor, where there will be a lecture hall, and private offices for the professors, the secretary and assistant secretary. The library will occupy the ninth floor and large lecture halls the tenth and eleventh floors. The building will be equipped with its own steam heating apparatus and ventilating system. There will be four elevators, each provided with a new safety locking device. C. P. H. Gilbert, 25th St. and Broadway, is Arch.

NEW YORK, N. Y.—Bids are asked until 9.30 a. m., July 31, by W. N. Wilner, Chn. Executive Com., Normal College, for repairs and alterations to the annex to the Normal College, located in East 22d St., about 100 ft. east of Lexington Ave., Boro. of Manhattan.

TRENTON, N. J.—Bids are asked by James Knox Taylor, Superv. Arch., Wash., until 3 p. m., Aug. 27, for construction (including heating apparatus, electric wiring and conduits) of the extension to the U. S. post-office and court-house at Trenton.

NEWARK, N. J.—Following are the lowest bidders and amounts of the various kinds of work of the new proposed High School of this city: Frank Cavalluzzo, excavating, $35,000; Walter E. Isetts, masonry, $320,000; H. M. Doremus & Co., carpentry, $91,000; Post & McCord, iron and steel work, $124,000; Jaehnig & Peoples, plumbing, $62,730; The Browe Co., electrical work, $16,887; A. F. Hinricksen, painting, $4,865; E. M. Waldron & Co., general, $762,275. The proposals exceed the appropriation. The board will not award the work under the present proposals, but new bids will be asked under a slightly revised plan.

PHILADELPHIA, PA.—Horace Trumbauer, Arch., Land Title Bldg., it is reported, has awarded a contract to DOAK & CO., of Philadelphia, for the completion of the Maternity Hospital building of the Hahnemann Hospital, in 15th St., near Race St. The cost will be $125,000.

*SPRING CITY, PA.—Bids are asked until noon, Aug. 9, at the offices of the Executive Department, Harrisburg, Pa., for erecting an institution for the feeble-minded and epileptics near Spring City. J. F. Sherwood is Secy. of Comn. appointed to erect the institution.

*WASHINGTON, D. C.—Bids are asked until noon, July 31, by Elliott Woods, Supt. U. S. Capitol Bldg. and Grounds, Washington, for furnishing direct radiators for hot water heating, House of Representatives Office Building, Washington.

Bids were opened as follows July 18 at the office of the Superintendent of the Grounds and Building, Library of Congress, Washington, for windows in the new National Museum Building, frames to be of cast-iron. (1) Basement, (2) long windows extending up both first and second floors, (3) attic: Hecla Iron Works, New York. Bid A, (1) $52,500, (2) $197,000, (3) $24,900; Bid B, bronze frames, (1) $68,500, (2) $275,000, (3) $43,500; Vandorn Iron Works Co., Cleveland, Ohio. Bid A, (1) $40,379 (2) $208,578, (3) $15,654; Bid B, frames according to their own design, cast-iron, (1) $33,523, (2) $187,421, (3) $12,435; Bid C, bronze frames, (1) $40,441, (2) $232,684, (3) $12,435; Snead & Co. Iron Works, Jersey City, N. J., Bid A, (1) $37,653, (2) $150,780, (3) $22,850; Bid B, cast bronze frames on the outside. (1) $98,315 (2) $395,425, (3) $75,017; Bid C, frames of rolled bronze. (1) $89,145, (2) $358,392, (3) $72,459; John W. Rapp, 1 Madison Ave., New York, Bid A, 16-oz. bronze, exterior and interior, (1) $55,000, (2) $243,000, (3) $15,000; Bid B, 20-oz. bronze, (1) $79,500, (2) $369,600, (3) $28,500; Bid C, 16-oz. bronze exterior, (1) $48,000, (2) $208,500, (3) $12,500; Bid D, semper melus bronze, (1) $41,000, (2) $174,000, (3) $10,000.

TUSCUMBIA, ALA.—We are officially advised that contract for erecting the proposed Colbert County jail at Tuscumbia was awarded to the STEWART JAIL WORKS CO., Cincinnati, Ohio, on July 16, at $165,000. The structure will be two stories high, 44 × 64 ft., fireproof and constructed of concrete, brick, stone and steel. E. J. Ostling, Montgomery, Ala., is Arch.

CHATTANOOGA, TENN. — Bids were opened as follows, July 18, at the office of James Knox Taylor, Superv. Arch., Washington, D. C., for construction of the U. S. post-office and court-house, Chattanooga: Jos. Kimby, Chattanooga, Tenn., $169,276, time, Aug. 30, 1909; H. A. Bishop, 218 La Salle St., Chicago, Ill., $140,000, time, Aug. 30, 1909; George Moore's Sons, Nashville, Tenn., $99,580, time, Aug. 30, 1909.

A 13 or 15-story office building will be constructed by the Stone Fort Land Co., on its property on the corner of Tenth St. and Georgia Ave., adjoining the new Patten Hotel, according to press reports. The plans for the building, it is said, will be drawn by W. T. Downing, Prudential Bldg., Atlanta. The building is to cost about $500,000. It will be fireproof throughout.

GARY, IND.—It is reported that the Lake Shore & Michigan Southern Ry. and the Baltimore & Ohio R. R. companies intend erecting a union depot at Gary to cost about $250,000. S. Rockwell, of Cleveland, Ohio, is Ch. Engr., Lake Shore & Michigan Southern Ry. Co.

INDIANAPOLIS, IND.—It is proposed to construct a city hall to cost about $500,000, and to be built on the county square, north of the court-house, fronting on Market St. The Mayor has been authorized to have preliminary plans prepared. Blaine H. Miller is City Engr.

FORT WAYNE, IND.—We are officially advised that bids will be called for in about 60 days for constructing an 8-story hotel here, which will cost about $300,000. The building will be 120 × 150 ft., of reinforced concrete construction, and will be built by the Fort Wayne Hotel Co., Louis F. Curdes, Secy. Charles Weatherhogg, Fort Wayne, is Arch.

TRAVERSE CITY, MICH.—Two new wings with a capacity of one hundred patients each will be added to the main building of the Northern Michigan Asylum, and other additions, repairs and alterations aggregating $105,000 will be made.

DETROIT, MICH.—Plans have been prepared for a hotel to be constructed by Dinan Bros. at Fort and Third Sts. The construction will be of pressed brick and terra cotta and the building will be 70 × 70 ft., three stories high, with provision for additional floors, should they be needed.

DECATUR, ILL.—Diel & Ginzel, of Lincoln, have been engaged to prepare plans for the building which the Pythian lodges propose erecting in this city and for which there is $125,000 appropriated.

CHICAGO, ILL.—William H. Pruyn & Co., Archs., 4217 Berkeley Ave., Chicago, will build a 3-story apartment house at the corner of Grand Boulevard and 44th St. It will be 100 × 155 ft. and will contain 21 apartments of five to nine rooms each. It will cost $100,000.

ST. PAUL, MINN.—The City Council will pass a $645,000 bond issue for erection of four modern high schools in this city, exclusive of the cost of site and equipment. George T. Redington is City Clerk.

MINNEAPOLIS, MINN.—It is reported that the J. & W. A. ELLIOTT CO., 905 Lumber Exchange, has secured the general contract to erect the Plymouth Congregational Church, 19th and Nicollet Aves. Shepley, Rutan & Coolidge are Archs., Ames Bldg., Boston, Mass. Cost, $175,000.

KANSAS CITY, MO.—Herman Streicher will erect two apartment houses each six stories, twelve apartments of Carthage stone and ivory buff brick with freight and passenger elevators and to cost $136,000. Plans are being prepared by Matt O'Connell, New Ridge Bldg., Kansas City.

ST. LOUIS, MO.—The Condie-Niele Glass Co., 19th and Pine Sts., is having plans prepared by Mauran, Russell & Garden, Chemical Bldg., for erection of mercantile building, six stories, 80 × 150 ft., brick and stone. Cost, $150,000.

McNair & Harris Realty Co., Eighth and Locust Sts., is having plans prepared by W. A. Swasey, Missouri Trust Building, for erection of theater to be four stories, 100 × 150 ft. of brick and stone and fitted with gas and electricity. Cost, $200,000. Bids will be received at once.

The building to be erected by Lindell Gordon, 112 North Eighth St., on the south side of Washington Ave., west of Twelfth St., will be seven stories high and will have a glazed terra-cotta and plate-glass front for the first two stories. The building is 50 × 150 ft. extending through to St. Charles St. It is to be finished April 1 and the contracts will be let next month. Estimated cost, $120,000.

The Building Commissioner has issued a building permit to the Washington University Corporation for construction of a 7-story slow combustion building at the corner of Eleventh and Spruce Sts. The building, according to the estimate in the permit, will cost $289,000. The plans for it have been prepared by Eames & Young, Archs., Wright Bldg., and the contract for its construction let to the JAMES H. BRIGHT CONTRACTING & BUILDING CO., Lincoln Trust Bldg. The lot has a frontage of 154 ft. on Spruce St., and a depth of 185 ft. on Eleventh St.

HOUSTON, TEX. — George F. Horton, County Engr., will prepare preliminary plans for proposed 4-story court house to be erected by Harris County. A. E. Amerman is County Judge.

TACOMA, WASH.—The Northern Pacific Ry. Co. will construct a passenger station here at once, it is stated. The depot will occupy the site of the present old station, and will be constructed of pressed brick, trimmed with stone. The approximate cost will be $500,000. The plans are being completed. A. R. Cook is Div. Engr., Tacoma.

SAN FRANCISCO, CAL.—The VONDER HORST BROS. have contract and will begin erection soon of a large 6-story and basement reinforced cement building on Mission St., near Fourth St. It will be known as the Heuter Building, and will be fireproof throughout. The ground floor of this building will contain one large store, which will extend the entire depth of the building to Jessie St. The upper floor will be converted into lofts for storage purposes. The estimated cost of constructing this building is $150,000. Charles F. Whittlesey, 536 Polk St., San Francisco, is Arch.

The Babcock Estate Co. has applied for a permit to construct a 2-story brick building at the corner of California and Battery Sts., to cost $102,000.

The Gore Improvement Co. has made application for a permit to erect a 3-story concrete structure at Market and Pine Sts., to cost $100,000.

LOS ANGELES, CAL.—Morgan & Walls, 232 North Main St., are reported to have prepared plans for the Gerhard-Eshman Bldg., which is to be erected at Seventh St. and St. Vincent Pl., at an estimated cost of $125,000.

MONTREAL, QUE.—The authorities at McGill College have called for competitive plans for a new medical college to replace the one recently destroyed by fire. The new building will be of stone, brick and steel concrete fireproof construction, and will cost $400,000. W. Peterson is Principal; W. Vaughan is Secy.

OTTAWA, ONT.—Bids are asked by Fred. Gelinas, Secy. Dept. Public Works, until Aug. 7 for the construction of an addition to Rideau Hall, the residence of the Governor-General.

VANCOUVER, B. C.—Bids are asked until July 31 for constructing proposed courthouse at Vancouver. F. C. Gamble is Public Works Engr., Lands and Works Dept., Victoria, B. C.; Dalton & Eveleigh, Victoria, are Archs.

WATER SUPPLY—IRRIGATION.

(denotes that this work is advertised in Engineering News.)*

BANGOR, ME.—The Water Board has accepted plans for constructing sedimentation basin at the pumping station and will lay 1,385 lin. ft. water pipe on the extension of Maple St.

WAREHAM, MASS.—A water-works system will probably be constructed. It is proposed to lay 8-in. main from wells at Tihonet, constructing pumping station, laying 10-in. pipe and erecting standpipe, 20 × 100 ft., with capacity of 240,000 gallons. Estimated cost, $65,000.

*SPRINGFIELD, MASS.—Bids are asked until 2 p. m., Aug. 21, by the Board of Water Commissioners of the City of Springfield for construction of work included under Contract No. 1, intake dam and tunnel, Little River Water Supply. E. E. Stone is Chn.; E. E. Lochridge, Springfield, is Engr.; Hazen & Whipple, 220 Broadway, New York, N. Y., are Consult. Engrs.

WRENTHAM, MASS.—G. FERRULLO & CO., of Boston, have secured the contract for constructing water-works at the following bid: 7,000 ft. 10-in. c.-i. pipe, including unloading, hauling, etc., 29 cts.; 10,000 ft. 8-in. c.-i. pipe, 27 cts.; 16,000 ft. 6-in. c.-i. pipe, 25 cts; 2,800 ft. 4-in. c.-i. pipe, 23 cts.; excavation for foundations per cu. yd., 50 cts.; concrete for stand pipe and pump foundation per cu. yd., $5; rock excavation per cu. yd., $3.75; laying service connection and materials per connection, $10.50. Edw. M. Blake, 8 Beacon St., Boston, is Engr.

DURHAMVILLE, N. Y.—No bids or designs were received by F. C. Stevens, Supt. Public Works, on July 18, for construction of an aqueduct to carry the Erie Canal over the Oneida Creek near Durhamville, Oneida County. Mr. Stevens had asked for the submission of plans and specifications for a proposed structure and proposals for doing the work. Frederick Skene is State Engr.

NEW YORK, N. Y.—Bids are asked until 3 p. m., Aug. 8, by the Park Board for furnishing all labor and materials necessary to construct and complete a [illegible] pumping plant in Forest Park, Boro. of Q[illegible], together with all the work incidental [illegible] reto. Moses Herrman is Pres.

*JAMESTOWN, N. Y.—Plans [illegible] and specifications for furnishing material [illegible] laying approximately 12,000 lin. ft. 16-[illegible] and 750 lin. ft. 12-in. water mains are o[illegible] at office of Engineering News, New Y[illegible]. Bids are asked by the Board of Water [illegible] commissioners, Clement B. Jones, Secy., until [illegible]on, Aug. 1. C. G. Jones is City Engr.

WINDOM (Orchard Park [illegible] office), N. Y.—The contract for constru[illegible] reservoir has been let to FIELD, BARKL[illegible] & UNDERWOOD, Inc., 514 Arcade Bldg., [illegible]hiladelphia, Pa. J. W. Ledoux, 112 No[illegible] Broad St., Philadelphia, Pa., is Ch. Engr.

CARTHAGE, N. Y.—The Bo[illegible] of Water Commissioners has let contract [illegible] constructing water-works system to H. [illegible] FAILING, of Baldwinsville.

JAMESTOWN, N. Y.—Plans [illegible] specifications for laying about 12,000 ft. [illegible]n. and 750 ft. 12-in. water mains, as adve[illegible]ed, are on file at office of Engineering Ne[illegible] New York. Bids are asked by the Board of [illegible]ater Commissioners, Clement B. Jones, [illegible]y., until Aug. 1.

LESTERSHIRE, N. Y.—The [illegible]ater Commissioners are considering sinki[illegible] well.

*FT. HANCOCK, N. J.—Bids [illegible] asked by M. N. Falls, Capt. and Quarter[illegible]ster, until 2 p. m., Aug. 21, for furnishing [illegible] and placing "Cook" strainer in deep well [illegible] Ft. Hancock.

MT. CARMEL, PA.—The Ma[illegible] Heights Council has let contract for [illegible]constructing municipal water plant to JAMES CHRISTIANA, of Shamokin, Pa., at about $15,000. Isaac Kemble is Boro. Engr.

BRACKENRIDGE, PA.—The Allegheny Valley Water Co. has let contract to the ROBERTS MFG. CO., of Philadelphia, for constructing mechanical filtration plant on Stieren St., for about $50,000.

*PHILADELPHIA, PA.—Bids are asked by the Department of Public Works, George R. Stearns, Dir., until noon, Aug. 22, for constructing preliminary filters at Torresdale, Contract No. 102, and Roxborough pipe extension system, Contract No. 108.

*NEWARK, DEL.—Bids are asked until Aug. 3 for installing about 6,000 lin. ft. 4-in. water main.

COMMERCE, GA.—At a recent election it was voted to issue bonds amounting to $45,000 for water-works. C. J. Hood is Mayor.

EDWARDS, MISS.—P. H. PORTER, Clinton, Ky., has secured contract for constructing water-works system.

EUNICE, LA.—P. H. PORTER, Clinton, Ky., has been awarded contract for installing water-works system.

CARENCRO, LA.—The contract for constructing water-works system has been let to P. H. PORTER, Clinton, Ky.

COOLINSTON, LA.—We are officially advised that Windsor Pipes, Secy. Coulee Drainage District, has tentatively awarded contract for constructing drainage canal, including clearing right-of-way, to the SECURITY CONTRACTING CO., of Royal Center, Ind., provided the bonds are disposed of in time to permit work to start Dec. 1. The work consists of about 198,416 yds. of excavation. L. L. Hidenger is U. S. Drainage Expert at Washington, D. C.

GIRARD, OHIO.—A water-works system will probably be installed by C. F. Brotherton.

YOUNGSTOWN, OHIO.—Bids are asked by the Board of Public Service, W. H. McMillin, Clk., until noon, July 26, for furnishing about 40 fire hydrants.

*CHESTERTON, IND.—The date for receiving bids for constructing system of water-works has been extended by the Home Water Co. from July 20 to Aug. 3.

MATTOON, ILL.—The Mattoon Water-Works & Reservoir Co. has let contract for constructing reservoir to LOOMIS & ROSE, of this city, at $8,890.

WITHEE, WIS.—Bids are asked by Marius Andersen, Village Clk., until 7.30 p. m., Aug. 2, for furnishing and laying 2,600 ft. of 6 to 8-in. cast-iron pipe, seven hydrants, three 6-in. valves, and erecting 30,000-gallon steel tank and tower.

*SIBLEY, IOWA.—Bids are asked by V. A. Burley, County Audr., until noon, Sept. 10, for constructing open ditch requiring removal of 103,000 cu. yds. of dirt.

BODE, IOWA.—The DES MOINES BRIDGE & IRON WORKS, of Des Moines, has secured contract for erection of 80-ft. steel tower and 40,000-gallon steel tank for $3,483.

DECORAH, IOWA.—Bids are asked until Aug. 5 by the Board of Supervisors, Decorah, for constructing water system at the poor farm at Freeport on either the automatic air pressure steel tank of 75 bbls. with 125 lb. pressure to the inch, 12-ft. steel wheel, steel tower 70 ft. high and pump to complete the job, or 500-bbl. tank overhead system, 60 ft. high. I. Linnevold is County Audr.

HASTINGS, MINN.—The City Council has let contract for constructing water-works and sewerage system to J. J. DUNNIGAN, of Shenandoah, Iowa, for $63,526.

BELLEPLAINE, MINN.—Bids are asked until 8 p. m., Aug. 12, for constructing water-works system. The work includes constructing steel tower and tank, distribution pipe line system, geared deep well gasoline engine and pump and brick building. Oscar Claussen, Guaranty Bldg., Minneapolis, Minn., is Consult. Engr.

RUSSELLVILLE, ARK.—Bids are asked by the Board of Water Commissioners, R. M. Newport, Chn., until Aug. 20 for furnishing material and constructing water-works. M. A. Earl & Co., of Muskogee, Ind. Ter., are Engrs.

LAMAR, COLO.—A gravity water-works system from Clay Creek, 14 miles south of Lamar, will probably be installed. Estimated cost, $150,000.

CANON CITY, COL.—Plans have been filed by the B[illegible] Land & Water Co. for constructing the Brush Hollow reservoir, to be located twelve miles east of Canon City. The reservoir will be constructed of concrete and masonry, [illegible] ft. high and 800 ft. long, with capacity of 1,000 acre ft. The supply will be furnished from Brush Hollow Creek and Brush Hollow supply ditch, with headquarters on Beaver Creek, six miles east of the reservoir. Estimated cost of reservoir, $50,000. Plans have also been filed for constructing the Brush Hollow supply ditch. The ditch will be constructed of cement, 18 ft. wide at top, 8 ft. deep, with carrying capacity of [illegible] cu. ft. per second. Estimated cost of ditch, $75,000. It is proposed to irrigate 15,000 acres of land and have reservoir and ditch in operation next spring.

DENVER, COLO.—The Moffatt Irrigation & Development Co. has recently been incorporated at $500,000 for constructing ditches and reservoir sites in Unitah County, Utah. The incorporators are: H. E. Sims, J. F. Galbreath, E. R. Locke, R. J. Walker, J. T. Nichols, W. R. Donelson and A J. Fowler.

SANTA FE, N. MEX.—The Cimarron Valley Land Co. has recently been incorporated with capital stock of $1,000,000. The company will construct reservoir near junction of Moreno and Cienguillo Rivers, whence a 20-mile irrigation canal will be constructed between the Cimarron and Rayado Rivers. The system will irrigate about 40,000 acres of land west of Springer. The incorporators are: Hilton M. Letts, Charles Springer, Frederic Whitney, George T. Reinley and A. H. Officer.

POMEROY, WASH.—Surveys are being run by L. W. Loehr, Engr., for irrigation of about 2,000 acres of land about 25 miles northwest of Pomeroy, on both sides of Snake River. Estimated cost, $25,000. Elmon Scott, of Pomeroy, is interested in this project.

SEATTLE, WASH.—See under Sewerage.

LA GRANDE, ORE.—Surveys are being run for constructing water-works from Beaver Creek. Estimated cost, $160,000.

REDMOND, ORE.—A water-works system will probably be installed. The plans call for 400,000-gallon tank, 40 ft. high, and water will be pumped into tank by gasoline engine.

LOS ANGELES, CAL.—The Board of Public Works has let contract to the J. D. HOOKER CO., of Los Angeles, for laying 13,000 ft. 6-in. No. 12 gage riveted sheet steel pipe at 22 cts. per ft., and 5,000 8-in. No. 14 gage riveted sheet steel pipe at 33 cts. per ft. The pipe is to be used for hydraulic sluicing in the construction of one of the reservoirs of the water system that is being constructed by the city at a cost of $24,000,000.

BOISE BARRACKS (Boise post-office), IDAHO.—The following bids were received July 1 by Capt. John S. Winn, Q. M., for constructing water distribution system, consisting of 6,900 ft. of 4-in. c. i. pipe and connections; Saml. T. Davis, Boise, $10,660, and Carlson Lusk Co., Boise, $10,782.

MONCTON, N. B.—The water-works system will be improved and extended. Cost, $18,000.

MONTREAL, QUE.—A by-law has recently been presented to the City Council which provides that $2,000,000 be borrowed and used in improving the water supply. The principal items of construction are as follows: Construction reinforced concrete conduit, lateral to present aqueduct, with capacity of at least 50,000,000 gallons of water per day; sinking suction well for pumps at lower end of conduit; extending conduit from the shore out into St. Lawrence River by means of pipes with intake piers; excavating for widening and deepening present aqueduct with stone walls, puddling, farm bridges, stop gates, fencing, etc.; widening and deepening tail race; erecting wheel house and equipping with pumping machinery, etc.

HAMILTON, ONT.—The city has applied for permission to extend water-works system. Cost, $6,500.

RAYMOND, ALTA.—See under Light and Power Plants.

SEWERAGE.

(* *denotes that this work is advertised in Engineering News.*)

*TOGUS, ME.—Bids are asked by Maj. A. L. Smith, Treas., Eastern Branch, N. H. D. V. S., Togus, until 11 a. m., July 31, for furnishing material and improving sewerage and drainage system.

*WESTFIELD, MASS.—Bids are asked by the Selectmen until noon, Aug. 3, for constructing about 3,250 lin. ft. 8 to 18-in. pipe sewer, together with manholes and catch-basins. Oren E. Parks is Town Engr.

*HARTFORD, CONN.—Bids are asked by the Board of Contract and Supply, James P. Berry, Secy. Pro Tem., until 11 a. m., July 29, for constructing Section A of Homestead Ave. intercepting sewer system. The work includes about 1,070 lin. ft. of 10-in. concrete conduit and 650 lin. ft. concrete or brick conduit of egg-shaped section 6 × 4 ins. in diameter. Frederick L. Ford is City Engr.

TORRINGTON, CONN.—We are officially advised that the following bids were received July 16 by the Board of Warden and Burgesses for constructing sanitary sewers: PIERSON ENGINEERING & CONSTRUCTION CO., Bristol, Conn., $42,138 (awarded contract); A. W. Bryne Co., $49,952; F. H. Corwin Co., $61,432; Longhi Bros. & Moscetti, $74,2[illegible]; Fred. W. Stowers, $68,432; Evelin Bros., $78,344; F. T. Ley Co., $83,927; Edward McManus, $99,836. Hugh W. Cronin is Boro. Clk. Walter A. Williston is Boro. Engr. Itemized bids are given this week under Contract Prices.

AMSTERDAM, N. Y.—Bids are asked until Aug. 2 by the Sewer Commissioners, A. T. Young, Secy., for constructing sewers in portions of various streets.

NEW YORK, N. Y.—Bids are asked by Bird S. Coler, Pres. Boro. of Brooklyn, until 11 a. m., July 31, for constructing relief sewer in Gold St., from pierhead line to Johnson St., and in Johnson St., from Gold St. to Hudson Ave., Section No. 1, Division No. 2, Gold St. system.

LONG ISLAND CITY, N. Y.—Joseph Bermel, Pres. Boro. of Queens, recently awarded the following contracts for constructing sewers: JOHN F. CLANCY, First Ave., from Ninth to 13th Sts., College Point, $2,850; JOHN F. CLANCY, Maple Ave., from Summit St. to Laurence, Flushing, $1,393; JOHN F. NEWMAN, Tenth Ave., Whitestone, from Long Island R. R. bridge to 14th St., and 14th St., from Tenth Ave. to Eighth, $2,205; GABRIEL HILL, Pearsall St., Long Island City, from Hunter's Point Ave. to Newtown Creek, $7,613; JOHN F. CLANCY, Third Ave., College Point, from Eighth St. to Tenth; Tenth St., from Third Ave. to Fifth, and Fifth Ave., from Tenth St., 100 ft. west, $14,535.

*WESTFIELD, N. J.—Bids are asked by the Town Council until 8.30 p. m., Aug. 5, for constructing about 2½ miles of trunk sewer from the sewage disposal works to a point near Madison Hill Road in Clark Township. The approximate estimate of work is as follows: One acre cleaning and grubbing; 1,430 cu. yds. excavation; 570 cu. yds. embankment; 131 cu. yds. concrete in place; 1,070 lin. ft. 15-in., 1,860 ft. lin. ft. 18-in. vitrified pipe in place; 1,150 lin. ft. 18-in., 12 lin. ft. 24-in. c-i. pipe laid; 23 manholes complete with covers and 31 sq. yds. dry paving on gravel. Lloyd Thompson is Town Clk. A. W. Vars is Town Surv.

*PLAINFIELD, N. J.—Plans and specifications for constructing storm sewers are on file at office of Engineering News, New York. Bids are asked by the Common Council until 8 p. m., Aug. 5. Work includes 2,543 ft. vitrified pipe, concrete or cement block sewer; five manholes and 20 12-in. branches. James T. MacMurray is City Clk.; Andrew J. Gavett is City Surv.

*SCOTTDALE, PA.—Plans and specifications for constructing sewer system in Scottdale are on file at office of Engineering News, New York. Bids are asked by A. L. Porter, Boro. Secy., until Aug. 1. J. B. Hogg, Connellsville, Pa., is Engr.

SHARON, PA.—Bids are asked until July 30 by Griff W. Nicholls, Boro. Engr., Sharon, for constructing sanitary sewers and appurtenances in portions of Baldwin and Division Aves. and Hill and Cedar Sts.

WASHINGTON, D. C.—The following bids were received July 15 by the District Commissioners for constructing sewer: Ed. G. Gummel, 612 F St., N. W., Washington, D. C., ordinary excavation, $1.30; sewer brick masonry, $22; 10-in. pipe, $.69; 12-in. pipe, $.85. John E. Lyons, 1303 Irving N. E., Brookland, D. C., ordinary excavation, $1.40; sewer brick masonry, $18.00; 10-in. pipe, $.85; 12-in. pipe, $.90. R. J. Beall Construction Co., 1217 F St., N. W., Washington, D. C., ordinary excavation, $.95; sewer brick masonry, $19.00; 10-in. pipe, $.90; 12-in. pipe, $.95. Jas. Coyle, 809 K St., N. W., Washington, D. C., ordinary excavation, $.90; sewer brick masonry, $20.00; 10-in. pipe, $.80; 12-in. pipe, $.90.

*WASHINGTON, D. C.—Bids are asked by the District Commissioners until noon, July 29, for constructing outlet to B St. sewer.

The District Commissioners have let contract for constructing sewer to WARREN F. BENNIZER CO., of this city. Bids were received July 8.

PORTSMOUTH, VA.—The following bids were received June 27 by the Sewerage Commission, Dr. A. A. Bilisoly, Chn., for furnishing material and constructing discharge pipe line for the Fifth Ward sewerage system through grounds of U. S. Naval Hospital: B. L. Duffy Co., of Greenville, N. C., $13,976; Bryan & Co., Jacksonville, Fla., $14,090, and A. J. Phillips and D. G. Porter, of Portsmouth, $14,424.

VICKSBURG, MISS.—W. G. Kirkpatrick, City Engr., of Jackson, Miss., has been appointed Sewerage Engineer for construction of system of sewers for Vicksburg. Estimated cost, $200,000.

BUCYRUS, OHIO.—MARTIN TINER and JOHN PORTMAN, of this city, have been awarded contract for constructing sewage disposal plant at the Crawford County Infirmary. E. G. Bradbury and George P. Shute, 85 North High St., Columbus, Ohio, are Engrs.

MEDINA, OHIO.—We are officially advised that bids were received July 16 by the Village Council for constructing sewers and sewage disposal works, etc., in Sewer Dists. Nos. 1 and 2, from (A) Furguson & Purcell, Lorain, Ohio; (B) H. W. Mathews; (C) John O'Neil, Akron, Ohio; (D) Wilds & Davison, Akron, Ohio; (E) Hitchke & Gibbons, Cleveland, Ohio; (F) Joseph Winterbottom; (G) Medina Construction Co., Medina, Ohio; (H) George B. Clifford, as follows: Dist. No. 1, sewers: (A) $8,717; (B) $10,732; (C) $7,315; (D) $7,533; (E) $10,288 and (F) $14,462. South side disposal plant: (B) $5,781; (A) $5,383 and (G) $4,880. Dist. No. 2, sewers: (A) $25,551; (B) $24,686; (H) $25,836; (C) $19,405; (D) $21,345; (E) $28,003 and (F) $40,381. North Side disposal plant: (A) $3,982; (B) $3,931 and (G) $13,769. In Dist. No. 1 the work consists of laying about 1,115 ft. 12-in. and 8,358 ft. 8-in. sewer pipe, six siphons, 39 manholes and sewage disposal works for Dist. No. 1. In Dist. No. 2 the work consists of laying about 1,325 ft. 15-in., 2,065 ft. 12-in., 24,891 ft. 8-in. and 245 ft. 6-in. sewer pipe, 1½ tons c.-i. pipe, 22 siphons, 101 manhole tops and pans, 505 manhole steps and constructing sewage disposal works for Dist. No. 2. O. O. Van Deuren is Village Clk. E. G. Bradbury and George P. Shute, Columbus, Ohio, are Engrs.

LAFAYETTE, IND.—Bids will soon be asked by the Board of Public Works for construction of Congress St. sewer. Estimated cost, $10,000.

GAS CITY, IND.—Bids will soon be asked by the city clerk for construction of sewer system. Estimated cost, $33,500.

TIPTON, IND.—Bids will soon be asked by the City Council for constructing sanitary sewer. Estimated cost, $30,000.

WAUKEGAN, ILL.—We are officially advised that contract for constructing the North Side Sewer has been awarded to D. WEST & CO., Loan and Trust Bldg., Milwaukee, Wis., at $58,089. Other bidders were H. D. Hallett, Aurora, Ill., $65,714; E. R. Harding, Racine, Wis., $62,891. M. R. Miller is Supt. of Public Works.

MARSHFIELD, WIS.—Bids are asked by M. G. Fleckenstein, City Clk., until noon, Aug. 10, for constructing sewer on Sixth St.

MILWAUKEE, WIS.—The Board of Public Works has let contract for constructing sewer on Davidson St., from Mineral to Walker Sts., and on Walker St., from Davidson St. to Milwaukee River, to R. J. HICKEY, for $11,613.

MILWAUKEE, WIS.—The Board of Public Works July 13 awarded to R. J. HICKEY the contract for constructing 744 lin. ft. concrete and iron sewer on Davidson and Walker Sts., at $15.69 per lin. ft.; total cost, $11,673.

GRAND FORKS, N. DAK.—Bids are asked by the City Council until 4 p. m., Aug. 5, for constructing lateral sewer. W. V. O'Connor is City Audr.

WAHPETON, N. DAK.—Bids are asked by Wm. R. Purdon, City Audr., until 8 p. m., July 27, for constructing sewer on Dakota Ave., from Second to Ninth Sts. Samuel F. Crabbe is Engr.

DICKINSON, N. DAK.—JAS. KENNEDY, of Fargo, has secured the contract for constructing sewers at the following bid: 14,982 lin. ft. 8-in. sewer, $1.24; 233 ft. 10-in. $1.35; 366 ft. 12-in., $1.46; 30 straight manholes, each $60; seven junction manholes, each $70; one standard flush tank, $170; catch basins, each $70; and lamp holes, each $10.

WAHPETON, N. DAK.—Bids are asked until July 27 by Wm. R. Purdon, City Audr., for constructing sewer in Dakota Ave.

WEBSTER, S. DAK.—Bids are asked until July 29 by the City Council for constructing sewerage system. Bids will be received on both glazed sewer pipe and concrete sewer pipe, all sizes over and including 18-in., and on glazed sewer pipe, all sizes under 18-in. Carl Malmberg is City Audr.

CAMDEN, ARK.—Bids are asked by the Commissioners of Improvement District No. 2, Camden, until noon, Aug. 15, for constructing sewer about 12,000 ft. in length. Louis Bauerlein is Secy.

BALLINGER, TEX.—The Ballinger Sanitary Sewerage Co., of Ballinger, has been incorporated with capital of $20,000 to construct sewerage system. Ton Ward, J. McGregor and W. A. Norman, of Ballinger, are interested.

SEATTLE, WASH.—We are officially advised that bids will be asked about Aug. 1 by the Alaska-Yukon-Pacific Exposition, Frank P. Allen, Jr., Dir. of Works, for constructing sewerage and water-works systems. Estimated cost, $50,000.

LOS ANGELES, CAL.—W. T. McBRIDE has been awarded contract for constructing sewers in various streets, for $6,838.

YORKTON, SASK.—A sewerage system will soon be constructed, including compressed air plant. Cost, $60,000.

GARBAGE DISPOSAL.

(* *denotes that this work is advertised in Engineering News.*)

NEW YORK, N. Y.—Bids are asked by W. Bensel, Comr. of Street Cleaning, until noon, Aug. 1, for final disposition of ashes, street sweepings and rubbish ,for a period of five years, beginning Oct. 28, 1907.

HORNELL, N. Y.—A garbage crematory may be constructed.

SCHENECTADY, N. Y.—The Board of Contract and Supply July 10 rejected the two bids opened June 26 for collection and sanitary disposal of ashes, rubbish, garbage and dead animals of the city for five years, beginning Oct. 1, 1907. L. B. Sebring is City Engr.

WASHINGTON, PA.—It has been decided to organize a stock company to build a garbage disposal plant. Ground has been leased and the plant will be 24 × 34, with a 60-ft. stack. Estimated cost, $10,000. Wagons and 200 tanks will also be required by the company, which will be known as the Washington Garbage Disposal Co.

NORFOLK, VA.—The Board of Control has let contract to the DECARIE MANUFACTURING CO., Minneapolis, Minn., for erection of crematory. Cost, $29,000.

HATTIESBURG, MISS.—LEWIS & KITCHEN, 433 Wabash Ave., Chicago, Ill., secured contract for constructing municipal garbage crematory for $9,960.

YOUNGSTOWN, OHIO.—No bids were received June 29 by the Board of Health, Clate A. Smith, Secy., for collection, removal and dispoal of garbage for period of five years.

STREETS AND ROADS.

(* *denotes that this work is advertised in Engineering News.*)

SKOWHEGAN, ME.—Bids are asked by the County Commissioners until 11 a. m., Aug. 5, for constructing highway from The Forks to Lake Moxie Station.

CONCORD, N. H.—Bids are asked by the State Highway Department until 5 p. m., Aug. 8, for constructing trap rock highway. Estimated cost, $7,000. A. W. Dean is State Engr.

TILTON, N. H.—Bids are asked by the State Highway Department until 5 p. m., July 29, for constructing gravel highway. A. W. Dean, at Concord, is State Engr.

BELMONT, N. H.—Bids are asked by the State Highway Department until 5 p. m., July 29, for constructing gravel highway. A. W. Dean, at Concord, is State Engr.

HOOKSET, N. H.—Bids are asked by the State Highway Department until 5 p. m., Aug. 8, for constructing gravel highway. Estimated cost, $3,100. A. W. Dean is State Engr., at Concord.

NEW BEDFORD, MASS.—An additional contract for laying 8,000 sq. yds. of bitulithic pavement has been awarded to the Warren Brothers Co., 93 Federal St., Boston, Mass. William F. Williams is City Engr.

PROVIDENCE, R. I.—The WARREN BROS. CO., 93 Federal St., Boston, Mass., has secured contract for laying 21,000 sq. yds. of bitulithic pavement. Otis F. Clapp is City Engr.

ROCHESTER, N. Y.—The WARREN BROS. CO., 93 Federal St., Boston, Mass., has been awarded contract for laying 21,500 sq. yds. of bitulithic pavement on Lake View Ave. Edwin A. Fisher is City Engr.

LONG ISLAND CITY, N. Y.—Joseph Bermel, Pres. Boro. of Queens, recently awarded the following contracts for grading, curbing and laying sidewalks in Long Island City: WILLIAM LOWE, Pleasure Ave., from Lawrence St. to Rapelye Ave., $3,777; JOSEPH A. BOYCE, Sixth Ave., from Vandeventer to Grand, $5,126; W. E. LOWE, 14th Ave., from Graham to Broadway, $4,688; JOHN HUGHES, 14th Ave., from Broadway to Newtown Road, $3,928; HASTINGS PAVEMENT CO., paving with asphalt block pavement on concrete foundation, 15th Ave., from Broadway to Newton Road, $4,714; TWOMBLAY & ELDERT, furnishing 5,000 cu. yds. broken stone trap rock 1½ ins., 5,000 cu. yds. ¾ in., 6,000 cu. yds. screening of trap rock, $45,920.

HERKIMER, N. Y.—An additional contract for laying 5,675 sq. yds. of bitulithic pavement has been awarded to the WARREN BROS. CO., 93 Federal St., Boston, Mass.

YONKERS, N. Y.—Contract for laying 10,000 sq. yds. of Acme asphalt pavement has been let to the WARREN ASPHALT PAVING CO., of Cambridge, Mass.

ALBANY, N. Y.—Bids are asked by the Board of Contract and Supply, Isidore Wachsman, Clk., until 3 p. m., July 29, for grading, curbing and paving carriageway of portion Myrtle Ave with vitrified paving blocks; repairing and laying sidewalks with flags and vitrified bricks and building receiving basins. Walter Melius is City Engr.

MORAVIA, N. Y.—We are officially advised that contract for paving Central St. has been awarded to S. P. HULL, of Cortland, N. Y., at $11,045.

NEW YORK, N. Y.—Bids are asked by J. A. Bensel, Comr. of Docks, until noon, Aug. 6, for furnishing all the labor and materials reqquired for preparing for and laying asphalt pavement at the approach to the Stapleton Ferry terminal at Staten Island.

The following bids were received on July 10 by J. A. Bensel for laying asphalt pavement over the deck of the pier at the foot of West 22d St., North River, over the new-made land in the vicinity of West 22d St., North River, at the approach to the 39th St. Ferry terminal at Whitehall St., Boro. of Manhattan, and at the approach to the Stapleton Ferry terminal at Staten Island: Barber Asphalt Paving Co., 114 Liberty St., (a) $1.67, (b) $1.65, (c) $2.45; Uvalde Asphalt Paving Co., 1 Broadway, (a) $1.30, $1.60, $2.40; Sicilian Asphalt Paving Co., 41 Park Row, $1.01, $2.75, $3.50.

Bids are asked until 3 p. m., Aug. 8, by the Park Board, for furnishing all the labor and materials necessary to construct and complete asphalt tile walks in Winthrop, Cooper and Seaside Parks, Boro. of Brooklyn, together with all the work incidental thereto. Moses Herrman is Pres.

NEW YORK, N. Y.—Bids are asked by the Department of Parks, Moses Herrman, Pres., until 3 p. m., Aug. 1, for constructing (A), cement sidewalk around Sunset, Amersfort, Fulton, Bedford and Irving Square Parks, Boro. of Brooklyn; (B), asphalt tile walks in Lincoln Terrace and Amersfort Parks, Boro. of Brooklyn.

Bids are asked by Louis F. Haffen, Pres. Boro. of The Bronx, until 11 a. m., July 30, for furnishing and delivering broken trap rock, lime or native stone screenings to the Bureau of Highways.

Bids are asked by the Department of Parks, Moses Herrman, Pres., until 3 p. m., Aug. 3, for furnishing and delivering 2,000 cu. yds. broken stone of trap rock and 2,000 cu. yds. screenings of trap rock, for parks, Boro. of The Bronx. Bids are also asked at the same time for grading and improving grounds north of municipal building in Crotona Park.

NEW YORK, N. Y.—The following bids were received July 17 by Bird S. Coler, Pres. Boro. of Brooklyn, for regulating, grading and curbing Schenck Ave., from New Lots Road to Stanley Ave., Boro. of Brooklyn: Chas. Cranford, Foster Ave., Brooklyn, $11,152; Daniel Douglas, 303 Pitkin Ave., Brooklyn, $11,400, and F. J. Gallagher, 490 Park Place, Brooklyn, $11,979.

Bids were also received at the same time for regulating, grading, curbing and laying sidewalks on Coney Island Ave., from Kings Highway to Neptune Ave., as follows: F. J. Gallagher, $41,347; Seaboard Construction Co., 639 Gates Ave., Brooklyn, $46,968; Charles Cranford, $42,923; N. Schneider Sons Co., 144 21st St., Brooklyn, $41,161; Daniel Douglas, $44,259; John E. Quinn, 71 Marlborough Road, Brooklyn, $40,838, and Bracken McAverly Co., foot of Sixth St., Brooklyn, $42,391. Itemized bids are given this week under Contract Prices.

*RIVERTON, N. J.—Bids are asked until 8 p. m., Aug. 8, for constructing about 30,000 sq. ft. cement paving, grading and graveling or sodding about 8,000 sq. yds. of sidewalks,

Edward H. Pancoast is Chn. Highway Com. Henry S. Haines, 306 Temple Bldg., Camden, is Boro. Engr.

McDONALD, PA.—Bids are asked by Dell Allison, Boro. Clk., until 5 p. m., July 29, for grading, paving and curbing portions of Barr and Washington Sts.

INDIANA, PA.—Bids have been received for construction of roads in White and Burrell Townships as follows: East Pike, 6,353 ft. in length; J. E. Francis, Punxsutawney, Pa., $18,486; Earl & Love, Corry, Pa., $14,575; Patrick Ridge, Pittsburg, $16,401; McCormick & Co., Philadelphia, Pa., $15,112; Booth & Flinn, Pittsburg, $14,718; West Pike, 6,200 ft.; J. E. Francis, $19,880; Earl & Love, $16,324; McCormick & Co., $15,474; Patrick Ridge, $17,537; Booth & Flinn, $14,978; Mahoning Road, 6,700 ft.; J. E. Francis, $18,612; McCormick & Co., $16,924; Patrick Ridge, $18,610; Booth & Flinn, $14,183; Earl & Love, $14,860. Blairsville Road, 8,320 ft.; J. E. Francis, $22,120; McCormick & Co., $16,575; Earl & Love, $17,657; Patrick Ridge, $22,115; Booth & Flinn, $16,046. Burrell Township Road, from Blairsville to Blacklick, 24,547 ft.; J. K. Palmer & Co., Clearfield, Pa., $64,359; G. Beraurdelli & Co., Paulton, Pa., $61,352; Granini Construction Co., Paulton, Pa., $62,763; Reade & Patton, Curwensville, Pa., $67,561; J. E. Francis, $74,221; J. W. Kelly, New Brighton, Pa., $64,554; Booth & Flinn, $57,841; J. C. McSpadden, Pittsburg, $59,313; McCormick & Co., $63,908; Rinehart Bros., East Liverpool, Ohio, $73,848; Earl & Love, $67,174; Patrick Ridge, $64,068; James Gardner, Blacklick, Pa., part of the work only, $46,486. Roads will be 16 ft. in width, and macadamized. Booth & Flinn will probably be awarded all contracts at their bids.

WILMINGTON, DEL.—Bids were received July 9 by the Levy Court of New Castle County for constructing macadam roads, as follows: Delaware City to Red Lion Creek, 3¼ miles, 12 ft. wide and 6 ins. deep, STEWART & DONOHUE, Wilmington, Del., $24,751 (awarded contract); Red Lion Creek to Tylout's Cross-roads, 1.38 miles, 12 ft. wide and 6 ins. deep, STEWART & DONOHUE, $10,118 (awarded contract); Summit Road, 2.35 miles, 12 ft. wide and 6 ins. deep, J. A. McManus, $17,043, Stewart & Donohue, $16,035, Theobald Harsch, $17,800; Mt. Pleasant Station to Boyds Corner, 3.46 miles, 12 ft. wide and 6 ins. deep, Donohue & Stewart, $22,891, J. A. McManus, Philadelphia, Pa., $25,454, Theobald Harsch, Norberth, Pa., $26,562; Depot Road, .13 miles, 16 ft. wide and 6 ins. deep, DAWSON & DAVIS, Devon, Pa., $1,289 (awarded contract), Stewart & Donohue, $1,267; Depot & Telegraph Roads, White Clay Creek, .6 miles, 16 ft. wide and 6 ins. deep, .52 miles, 12 ft. wide and 8 ins. deep, .67 miles, 16 ft. wide and 8 ins. deep, DAWSON & DAVIS, $18,229 (awarded contract), Stewart & Donohue, $17,900; Telegraph Road, Mill Creek, 4.26 miles, 12 ft. wide and 8 ins. deep, DAWSON & DAVIS, $37,383, Stewart & Donohue, $40,480. Francis A. Price is New Castle County State Highway Commissioner.

BALTIMORE, MD.—An additional contract for laying 1,740 sq. yds. of bitulithic pavement has been let to the WARREN BROS. CO., 93 Federal St., Boston, Mass.

WASHINGTON, D. C.—The District Commissioners have divided the contract for grading between G. B. MULLEIN and LETTIMER & LINNEY, both of Washington. Bids were received June 29.

BALLS BLUFF, VA.—The only bid received July 12 at the Depot Quartermaster's Office, Washington, D. C., for constructing government roadway at Balls Bluff, was submitted by the James F. Bradley Co., of Richmond, Va., as follows: Without macadamizing, $4,650; 2-in. macadam, $5,520; 3-in. macadam, $5,900; 4-in. macadam, $6,200. Work to begin in ten days after award of contract and completed in 90 days.

GRAFTON, W. VA.—Contracts have been awarded to L. L. BUTCHER and J. M. KEANE for curbing and grading Barrett St. in South Grafton preparatory to paving.

KERNERSVILLE, N. C.—The County Commissioners have let contract to S. S. ORDWAY & SON CO. for constructing macadam road 3.31 miles in length, for $15,250. The road will run from new macadam road from Kernersville to macadam road from Waughtown.

ASHEVILLE, N. C.—The ATLANTIC BITULITHIC CO., of Richmond, Va., has been awarded contract for laying 4,203 sq. yds. of bitulithic pavement. B. M. Lee is City Engr.

*PENSACOLA, FLA.—Bids are asked by the Board of Bond Trustees, L. Hilton Green, Chn., until noon, Aug. 27, for grading, paving and curbing various streets. The work includes 170,700 sq. yds. clay or shale block, asphalt, bitulithic, wood block or macadam pavement and 115,950 lin. ft. concrete curb. T. Chalkley Hatton, Wilmington, Del. and Pensacola, Fla., is Ch. Engr.

ENSLEY, ALA.—The City Council has let contract for paving Ave. E, from 16th St. to 21st St. and 19th St., from First Ave. to Ave. I, to the SOUTHERN BITULITHIC CO., of Birmingham, Ala., at $1.90 per sq. yd. The work includes about 21,500 sq. yds. of paving.

MONTGOMERY, ALA.—Bids are asked until Aug. 5 for laying sidewalks, curbs, etc. R. S. Williams is City Treas.

ASHLAND, KY.—A contract for laying 15,716 sq. yds. of brick pavement has been awarded to the SOUTHERN BITULITHIC CO., of Nashville, Tenn.

CINCINNATI, OHIO.—The following bids were received July 19 by the Board of County Commissioners, Fred. Driehs, Clk., for improving Lick Run Pike: N. Ruebel, 1957 Harrison Ave., $60,952; A. J. Henkel & Bro., 703 Mercantile Library Bldg., $60,851; M. Sullivan & Son, 703 Mercantile Library Bldg., $61,197, and The Louis Drach Construction Co., 26 Guarantee Title & Trust Bldg., $60,138, all of Cincinnati. Itemized bids are given this week under Contract Prices.

CINCINNATI, OHIO.—The County Commissioners have let contract for improving Ohio Pike, from Bogart Road to the county line, to the LOUIS DRACH CONSTRUCTION CO., for $30,205.

ZANESVILLE, OHIO.—The County Commissioners have let contract for macadamizing one mile of the Lore City Infirmary Road to FOWLER & COLE, of Mt. Vernon, Ohio, for $6,690.

STEUBENVILLE, OHIO.—Bids are asked by the Board of Public Service, T. W. Vance, Clk., until noon, Aug. 19, for paying Seventh St., from Logan to Ross Sts., with hard burned fire brick.

MARION, OHIO.—Bids are asked by the Board of Public Service, William Fies, Clk., until noon, July 30, for constructing sandstone sidewalks on various streets. George E. Dwyer is City Engr.

LAWRENCEBURG, IND.—Bids are being received by J. F. Frazier, City Clk., for construction of cement walk, paving and combined curb and gutters in Third, Maine and Mill Sts.

NAPPONEE, IND.—The CENTRAL PAVING CO., of Rochester, Ind., has secured contract for about two miles of paving with Poston block, for $78,000.

ROCKVILLE, IND.—Bids are asked by the County Commissioners until 1 p. m., Aug. 7, for construction of Crooks and Wimer Road in Union Township, Penee Road in Wabash Township, and Union Chapel Road in Washington Township, comprising an aggregate of over eleven miles of road. H. A. Henderson is County Audr.

COLUMBUS, IND.—Bids are asked by the County Commissioners until 10 a. m., Aug. 5, for construction of 1½ miles of gravel road in Clifty Township. John M. Davis is County Audr.

LAFAYETTE, IND.—Bids will soon be asked by the Board of Public Works for grading, graveling, constructing brick gutters, cement curb and sidewalks in Ball and Eleventh Sts.

SOUTH BEND, IND.—Bids are being received by the Board of Public Works for paving various streets and alleys with brick, macadam and asphalt, including concrete curbs, gutters and cement walks. M. H. McInerry is Chn.

MARTINSVILLE, IND.—Bids are asked by the County Commissioners until Aug. 6 for construction of gravel and macadamized road in Ray Township. B. E. Thornburg is County Audr.

MARTINSVILLE, IND.—Bids are being received by the County Commissioners for construction of the uncompleted portion of the Madison gravel road in Ashland Township. B. E. Thornburg is County Audr.

MUNCIE, IND.—Bids will soon be asked by the Board of Public Works for paving Seymour, Charles and Adams Sts. with brick.

HARTFORD CITY, IND.—Bids are asked by the County Commissioners until 10 a. m., Aug. 8, for construction of macadam road in Harrison Township, known as the Neal Road. L. W. Daugherty is County Audr.

WASHINGTON, IND.—Bids are asked by the Board of County Commissioners until 2 p. m., Aug. 6, for constructing rock and gravel roads. Thomas Nugent is County Audr.

EAST ST. LOUIS, ILL.—Bids are asked until noon, July 30, by the City Council for improvement of 24th St., from the northerly line of Belleview Ave. to the northeasterly line of Illinois Ave. The following amount of material and labor to construct said improvement will be required: 750 cu. yds. filling in excess of excavation; 1,742 lin. ft. combination granitoid, guttering, curbing, set; 2,850 sq. yds. vitrified brick pavement, grouted and laid upon concrete foundation, 6 ins. thick; 992 cu. yds. surface excavation placed in fill. W. J. Crocken is City Engr.

ST. PAUL, MINN.—The Board of County Commissioners will spend $50,000 this summer and fall for macadamizing roads. E. G. Krahmer is County Audr.

RED WING, MINN.—Bids are asked by the Board of Public Works until 2 p. m., July 26, for grading portion of East Seventh St. A. E. Rhame is City Engr.

FT. McKENZIE, WYO.—Bids are asked by Capt. Wm. D. Davis, Q. M., until 10 a. m., Aug. 5, for constructing cement walks, steps and road-crossings at this post.

INDEPENDENCE, MO.—The KANSAS BITULITHIC CO., of Kansas City, Mo., has been awarded contract for laying 9,350 sq. yds. of bitulithic pavement. R. L. Procter is City Engr.

MARSHALL, TEX.—The TEXAS BITULITHIC CO., of Dallas, Tex., has been awarded contract for laying 27,684 sq. yds. of bitulithic pavement.

DENVER, COLO.—We are officially advised that the Board of Public Works has awarded contract for paving Broadway, Paving District No. 3, to THE COLORADO CO., of this city, for $69,218. The itemized bid is given this week under Contract Prices. W. D. Salter is Asst. Engr.

SEATTLE, WASH.—We are officially advised that bids will soon be asked by the Alaska-Yukon-Pacific Exposition, Frank P. Allen, Jr., Dir. of Works, for about 250,000 cu. yds. of grading. Bids will be asked during the winter for road work, curbing, guttering, etc.

The following contracts have been awarded: J. S. HOLT, grading and curbing Greenwood Ave., $115,958; PAUL STEENSTRUP, laying cement walks on portion of East Gales St., $4,680; INTERNATIONAL CONTRACT CO., grading and curbing 34th Ave., $10,474. R. H. Thomson is City Engr.

ASHLAND, ORE.—Bids are asked by the City Council until July 30 for laying about 16,860 sq. yds. macadam pavement, grading and laying concrete curbs, gutters and crosswalks. Frank C. Kelsey, 504 Columbia Bldg., Portland, Ore., is Engr.

TORONTO, ONT.—Contract for laying 2,614 sq. yds. of bitulithic pavement has been let to the WARREN BITUMINOUS PAVING CO., of this city. C. H. Rust is City Engr.

CHATHAM, ONT.—The WARREN BITUMINOUS PAVING CO., of Toronto, Ont., has secured contract for laying 7,900 sq. yds. of bitulithic pavement.

MANUFACTURING PLANTS.

(denotes that this work is advertised in Engineering News.)*

CAMBRIDGE, MASS.—The Boston Woven Hose & Rubber Co., Cambridge, Mass., will increase its plant by erection of a concrete and brick foundry building 75 x 160 ft., and a 4-story brick hose building, 60 x 326 ft.

NEW BEDFORD, MASS.—The contract for the erection of Manomet Mill No. 2, the addition to the present plant of the Manomet Mills, has been awarded to the B. F. SMITH CO., of Pawtucket, R. I., and work on the new mill will be begun immediately. It is reported that the plans call for a structure 113 x 500 ft. and four stories high. The Manomet Mill No. 2 will be placed between the Nonquitt and the present Manomet Mill.

WILLIMANTIC, CONN.—The contract for the contemplated alterations at the Pequot Mills at Montville will be let soon. The mills are owned by Joseph Mercer, of this city. The plans include remodeling Mill No. 1, which is a frame structure.

SOUTH MANCHESTER, CONN.—Cheney Bros., manufacturers of silk at South Manchester, Conn., have awarded the contract to build two silk mills to BEATTIE & CORNELL, of Fall River. The buildings will be three stories high and will be built of brick. They will be 300 ft. long and 60 ft. wide.

HARTFORD, CONN.—Plans for the plant which the Royal Typewriter Co. is to erect on New Park Ave., have been completed, and the contract will be awarded in a few days. There will be a main factory building four stories high and 51 x 308 ft. A 4-story factory will be built 50 x 145 ft. Three single story structures will be included also.

NEW YORK, N. Y.—Bids are asked until July 31 by William S. Patten, Asst. Q. M. Gen., U. S. A., 39 Whitehall St., New York, for furnishing and delivering alongside of vessel within reach of ship's tackle in the harbor of New York, a complete ice making and distilling plant.

Bids are asked until 11 a. m., July 30, by John V. Caggey, Comr. of Dept. of Correction, for furnishing all labor and material required for the erection and completion of an extension to the present boiler house, including a new chimney and underground chimney connections, and the installation of three new boilers, 250 HP. each, at Hart's Island, N. Y.

BUFFALO, N. Y.—The Barcalo Mfg. Co., Buffalo, N. Y., manufacturer of iron and brass bedsteads, will extend its plant on Louisiana St., it is stated, by building a brick addition.

WEST ALBANY, N. Y.—Bids are asked until July 25 by George W. Kettredge, Ch. Engr., New York Central & Hudson River R. R. Co., Grand Central Station, New York, for the erection of the boiler shop at West Albany. We are officially advised that the following is a description of the building to be erected: Building, 125 ft. x 430 ft., average height 40 ft.; construction will be of steel, concrete and brick with wooden roof purloins and sheathing, including electric light and hot air heating system; structural steel under separate contract.

MACON, GA.—See under Light and Power Plants.

PHILADELPHIA, PA.—JOSEPH BIRD, 213 North Eleventh St., has contract and has been granted a permit to build a 4-story brick manufacturing building, measuring 80 x 61.4 ft., corner of American and Willow Sts., for the Lansing Wheelbarrow Co., 1104 Noble St. The building will cost $24,300.

William Steel & Sons Co., 1600 Arch St., Philadelphia, are preparing plans for a 6-story slow-burning factory, 50 x 110, to be erected at Noble and Darien Sts., for S. Rosenau & Co. Cost, $100,000.

PITTSBURG, PA.—The American Spiral Spring & Mfg. Co., 56th St., Pittsburg, has purchased a plot of ground, 100 x 400 ft., adjoining its plant on Butler St., upon which it intends to erect a building 60 x 200 ft., to be used for the manufacture of special flat and spiral springs.

CAMBRIA, VA.—The Averill-Mitchell Corporation, recently organized to establish furniture factory, will erect buildings 75 x 175 ft., 100 x 125 ft. and 60 x 70 ft., at a cost for buildings and equipment of $25,000. Moore Bros. are Archs.; B. Hay is Engr.

ELM GROVE, W. VA.—The Wheeling Enameled-Iron Co., it is reported, will double the capacity of its plant at Elm Grove, and $60,000 will be expended in the general improvements. An additional foundry building 110 x 63 ft. will be erected adjoining the present one, and will be almost entirely of steel frame construction. The contract for the steel frame material and the steel construction work is reported to have been awarded to the RIVERSIDE BRIDGE CO., of Martins Ferry.

BENWOOD, W. VA.—The National Tube Co. is preparing plans for the erection of a blast furnace to cost about $1,000,000, which will add daily about 500 tons of pig iron to the production of the United States Steel Corporation. This new furnace will be added to the Riverside Tube Works at Benwood, W. Va., to replace Furnace B, which has been out of commission for a long time.

SHARPSBURG, N. C.—It is reported that a cotton mill of 10,000 spindles will be erected here by A. N. Wood, J. Edward Jefferies, W. C. Hamrick and others of Gaffney, S. C., who propose organizing a company with a capital stock of $200,000.

TAYLORSVILLE, N. C.—We are officially advised that a brick cotton mill to cost $12,000, with equipment which will cost $90,000, will be built here. Contracts will be let in August. The building will be constructed of brick, 75 x 250 ft. A. C. Payne is Secy.-Treas.; F. H. White is Vice-Pres. and Gen. Mgr. E. L. Hedrick is interested also.

YORKVILLE, S. C.—The directors of the Lockmore Cotton Mills have awarded contract to J. J. KELLER & CO. of Rock Hill, S. C., for erection of buildings for proposed 6,500-spindle cotton mill plant. Thomas P. Moore is Pres., and Joseph F. Wallace, Secy. Capital stock is $100,000.

TAMPA, FLA.—A $25,000 sugar factory, 45 x 100 ft., will be erected here by H. B. Roberts, of J. W. Roberts & Bro.

COLUMBUS, MISS.—The Southern Railway Co. in Mississippi will erect a roundhouse and machine shop to cost $30,000. F. T. Lack, Mobile, Ala., is Arch.; C. F. Blue, Mobile, Ala., is Engr.-in-Charge.

SHREVEPORT, LA.—The Lindsay Wagon Co., of Hattiesburg, Miss., has purchased site for location of factory in Shreveport to manufacture 8-wheel log wagons.

CHATTANOOGA, TENN. — The Southern Car Mfg. & Supply Co., of Beaumont, Tex., J. A. Wiggs, Jr., proprietor, will locate a plant in Chattanooga, Tenn., it is stated. A 12-acre site has been purchased next to the plant of the American Brake-Shoe & Foundry Co., for about $20,000. Arrangements have been made with Adams & Alsup, Chattanooga, for drawing plans for the buildings. The contract for the structural material has been let to the CONVERSE BRIDGE CO., Chattanooga. The company will manufacture engines, pumps, &c.

KNOXVILLE, TENN.—A plant to manufacture ranges will be erected here by T. J. Hinton, James Carson, J. Wooten, Ernest Prater and Frank Jones. Cost, from $25,000 to $35,000.

The Southern Extract Co. will rebuilt its plant recently damaged by fire. Three buildings are to be erected, two each 175 x 45 ft., and one brick building 40 x 50 ft. Cost, about $40,000.

NASHVILLE, TENN.—The plant of the White Trunk & Bag Factory, located in West Nashville, which was recently destroyed by fire at a loss of about $45,000, will be rebuilt at once. D. W., J. P. and G. M. White and George C. Brady are members of company.

NASHVILLE, TENN.—Plans for the shoe factory to be erected by Manier, Dunbar Co. are being prepared by G. L. Lockhart, First National Bank Bldg., and it is expected that work will begin at once. The building will have a frontage of 50 ft. with a depth of probably 250 ft., and will be either three or four stories in height. The building will be erected with a view to future expansion. Machinery will be installed with a capacity for the manufacture of from 600 to 1,500 pairs of shoes a day, but it is not the intention of the firm to begin operations with the full capacity of the plant. The cost complete will be about $40,000, the buildings costing about $12,000.

WILMINGTON, OHIO.—Bids are asked until 11. a. m., Aug. 8, by J. M. Fisher, Audr. of Clinton County, at Wilmington, for labor and material necessary for the erection and completion of a laundry building to be constructed of concrete at the Clinton County Infirmary.

CLEVELAND, OHIO.—It is reported that plant for the manufacture of chains will be erected here by the Cleveland Chain & Mfg. Co., Cleveland, recently incorporated with a capital stock of $20,000 by Louis D. Round, Louis D. Cull, Hannah Round, Albert Stanner and David D. Round.

Plans have been prepared for a $25,000 2-story factory for the Peerless Motor Car Co. McGeorge & Son, Collinwood, Ohio, are Archs.

HARTFORD CITY, IND.—The American Window Glass Co. is having plans prepared for erection of an addition to the company's present plant, sufficient to double present capacity. Estimated cost, $40,000.

LOGANSPORT, IND.—The Logan Truck Co. has been incorporated with a capital of $100,000. The object of the company is to construct, establish and equip a plant to manufacture car trucks for steam and interurban cars. C. F. Williams, C. B. Holmes and H. R. Adams are Directors.

PORTLAND, IND.—The Himes Manufacturing Co., recently incorporated, will construct and equip a factory plant to manufacture metal and wood derricks and oil, gas and water well drilling machinery and supplies.

EVANSVILLE, IND.—The Evansville Sash & Door Co. will receive bids soon for the erection of an addition equal in size and capacity to the present plant on Ohio St. A. C. Hodson is Mgr.

The New York Dimension Co. will soon ask for bids for construction of a large factory on Bellview Ave. The buildings will be 135 x 60 ft. and 113 x 50 ft., with a dry-house 40 x 75 ft., an engine room 20 x 20 ft., and a boiler room 25 x 30 ft. F. J. Schlotter is Arch.

GARY, IND.—The Chicago, Lakeshore & Eastern Ry. Co. has secured land upon which to build machine shop. The shops now maintained at East Chicago will be moved to Gary.

ELKHART, IND.—Plans are being made for construction of a factory building 150 x 280 ft. in this city by the Elkhart Industrial Association, William Rose, Secy., for Gossard Corset Co.

INDIANAPOLIS, IND.—The Indianapolis Motor Car Co. will ask for bids for the erection of a factory 72 x 102 ft., three stories high as soon as plans can be completed.

MUNCIE, IND.—M. T. Hanley and associates are preparing to ask for bids for erection and equipment of a rolling mill in this city.

DETROIT, MICH.—A permit for a factory for the Detroit Alaska Knitting Co., to be erected at 575-577 Michigan Ave., has been granted to R. E. Rossman. The structure will be a 2-story brick of modern design and equipment and will be completed early in the fall. The new building will cost about $20,000.

MARQUETTE, MICH.—The directors of the Lake Shore Engine Works will build a new manufactory. The capital stock has been increased from $150,000 to $200,000.

PEORIA, ILL.—Arrangements are being made to enlarge the plant of the Keystone Fence Co., South Bartonville, Peoria, Ill. Cost, about $100,000.

CHICAGO, ILL.—William L. Klewer, Arch., Schiller Bldg., 100 Randolph St., has prepared plans for a 2-story side addition, 32 × 38 ft. to a factory at 443 Fifth Ave., for Furst & Kerber Cut Stone Co., on the premises. It will be of brick and stone, have gravel roof, probably be heated from the main building, and have wiring for electric light.

MILWAUKEE, WIS.—The Waltham Piano Co., William Kootz, Pres., will erect a $50,000 piano factory in the Webster Ave. addition, it is reported, located on Vienna and Holland Aves.

LA CROSSE, WIS.—The FOSTER CONSTRUCTION CO., Empire Bldg., Milwaukee, has been awarded the contract for the new Listman mill to be erected at La Crosse, it is reported. The building will be six stories high, of brick and concrete construction.

ST. PAUL, MINN.—Downs & Eads, Archs., Minneapolis, Minn., have let the general contract for the erection of the box factory for the Coffin Box & Lumber Co., at Midway to W. A. CAMERON & CO., Ryan Bldg., St. Paul. It will have two stories, 80 × 193, of pressed brick and mill construction, with pitch and gravel roofing. Cost, $50,000.

SPRINGFIELD, MO.—The Arnold Co., Archs. and Engrs., Borland Block, is completing plans for a plant for the manufacture of cars and locomotives, to be built at Springfield, Mo., for the St. Louis & San Francisco R. R. Co. J. F. Hinckley, Ch. Engr., St. Louis, Mo. It will comprise several large 1-story and other buildings, with concrete foundations, superstructures of brick and steel, gravel roofs, steam heat, electric light and the latest equipment and appliances. About 3,000 tons of steel will be required. The cost is estimated at $5,000,000.

SAN ANTONIO, TEX.—The Alamo Cement Co., of San Antonio, has accepted plans for the construction of a new cement plant near this city. The plant will cost about $300,000. It will have a capacity of 500 bbls. of cement daily and will be so constructed that the capacity can be increased to 1,000 bbls. daily without a great additional cost. The plant will be located about five miles north of San Antonio, upon a tract containing 300 acres of cement material.

DALLAS, TEX.—The Southwestern States Portland Cement Co., of Dallas, is preparing to erect a cement plant in West Dallas. The company purchased 400 acres of cement land in the vicinity of West Dallas. It is reported that about $1,000,000 will be spent in erecting the new plant.

EL PASO, TEX.—The Southwestern Portland Cement Co., of El Paso, has adopted plans for a cement plant which it will erect five miles west of this city. The plant will cost about $1,100,000. The object of the company in erecting this plant is to be able to furnish cement for use in the construction of the Engle irrigation reclamation dam near El Paso.

TACOMA, WASH.—A permit has been granted to the Northern Pacific Ry. Co., for a 100 × 186-ft. addition to the machine shops at South Tacoma, a blacksmith shop and for a storage building, 28 × 176 ft. The total cost of the three structures will be $125,000. W. L. Darling, St. Paul, Minn., is Ch. Engr.

TORONTO, ONT.—Henry Simpson, Arch., of Toronto, it is stated, will build a $50,000 factory on site of old Parliament St. School for the Aluminum & Crown Stopper Co. The building will be of mill construction, and five stories high.

PETERBORO, ONT.—The Colonial Weaving Co., Peterboro, is contemplating erecting factory 200 × 60 ft., and install machinery costing $30,000.

STRATFORD, ONT.—It is reported that the Grand Trunk Ry. are to rebuild their Stratford car shops on a large scale. The new shops will be 95 × 175 ft., and will be run with electricity throughout. One large 120-ton crane will be installed. Joseph Hobson is Ch. Engr., Montreal, Que.

LETHBRIDGE, ALTA. — The Waterton Land & Power Co. will erect a saw and planing mill at Lethbridge costing $40,000.

MISCELLANEOUS CONTRACTS.

(denotes that this work is advertised in Engineering News.)*

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

WHARF.—New Orleans, La.—Bids are asked until noon, Aug. 3, by Capt. B. T. Clayton, Q. M., New Orleans, for repairing wharf at Jackson Barracks, La.

DREDGING.—Cheboygan, Mich.—Bids are asked by Col. Chas. E. L. B. Davis, Corps Engrs., U. S. A., Detroit, until 3 p. m., Aug. 15 for dredging harbor at Cheboygan.

*DREDGING.—New London, Conn.—Bids are asked until noon, Aug. 19, by Maj. Harry Taylor, Corps Engrs., U. S. A., for dredging at mouth of Connecticut River, Conn.

BULKHEAD.—Long Branch, N. J.—Bids are asked until Aug. 5 by the City Council for constructing a bulkhead on the ocean front near Atlantic Ave. Bryant B. Newcomb, City Clk.

CONDUITS, CABLE.—Charlottesville, Va.—The Albemarle Telephone Co. has had plans and estimates completed for conduit and aerial cable, and desires bids from contractors for constructing same.

TORPEDO BOATS.—Washington, D. C.—The time fixed for opening bids for constructing torpedo boat destroyers is changed from Aug. 1 to Sept. 3, 1907. Truman H. Newberry, Acting Secy. of the Navy.

WIRE FENCE.—Newport, R. I.—Bids are asked by Capt. W. C. Metcalf, Q. M., U. S. A., until 3 p. m., Aug. 5, for furnishing and placing wire fence around U. S. reservation near Saunderstown, R. I.

DOCK REPAIRS.—Troy, N. Y.—Bids are asked until July 26 by Board Contract and Supply for furnishing material and repairing city docks at foot of 16th, 17th and 18th Sts., North End. James M. Riley, Clk.

WIRELESS STATION.—Omaha, Neb.—Bids are asked by Maj. Thomas Cruse, Q. M., Omaha, until 11 a. m., Aug. 8, for constructing a balloon house, a hydrogen gas house and a wireless telegraph station at Fort Omaha, Neb.

GREENHOUSE.—New York, N. Y.—Bids are asked until 3 p. m., Aug. 1, by the Park Board, for completely erecting and constructing a greenhouse in the Botanical Garden, in Bronx Park, in the City of New York. Moses Herrman is Pres.

WHARF, ETC.—Somers Point, N. J.—Bids are asked by James E. Scull, City Clk., until Aug. 5 for grading and graveling Harbor Lane and building a bulkhead or wharf on Harbor Lane. E. D. Rightmire, City Engr., Bartlett Bldg., Atlantic City.

*BREAKWATER WALL.—Key West, Fla.—Bids are asked by James Knox Taylor, Supervis. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Aug. 14, for construction of a new breakwater wall at the U. S. Marine Hospital, Key West, Fla.

*DREDGING.—Norwalk, Conn.—Bids are asked until noon, Aug. 12, by Maj. Harry Taylor, Corps Engrs., U. S. A., New London, Conn., for dredging in Norwalk Harbor. Specifications and bidding sheet are on file at office of Engineering News, New York.

*CANAL.—Milner, Idaho.—Bids are asked by Paul S. A. Bickel, Ch. Engr., Twin Falls North Side Land & Water Co., Milner, until 3 p. m., Aug. 1, for constructing 16 miles of canal. Plans, specifications and bidding sheet are on file at office of Engineering News, New York.

FILLING IN.—Portsmouth, N. H.—Bids are asked until 11 a. m., Aug. 10, by R. C. Hollyday, Ch. Bureau Yards and Docks, Navy Dept., Washington, D. C., for filling in back of quay wall, Navy Yard, Portsmouth. Specifications are on file at office of Engineering News, New York.

*CRIB BREAKWATERS.—Racine, Wis.—Bids are asked by Maj. W. V. Judson, Corps. Engrs., U. S. A., Milwaukee, Wis., until 2 p. m., Aug. 2 for building crib breakwaters at Racine and Kenosha harbors, Wis. Specifications and bidding sheet are on file at office of Engineering News, New York.

*DREDGING.—Savannah, Ga. — Bids are asked by Lieut.-Col. Dan C. Kingman, Corps Engrs., U. S. A., until noon, Aug. 22, for dredging in the inner and outer harbor at Brunswick, Ga.

*Bids are also asked by Lieut.-Col. Kingman, until noon, Aug. 23, for dredging Skidaway Narrows, Ga.

TUG.—Washington, D. C.—Bids were opened July 17 at the office of the Revenue Cutter Service, Treasury Building, Washington, D. C., for the construction of a tugboat. Only one bid was received, and this was $35,000 in excess of the appropriation: The Maryland Steel Co., Sparrow Point, Md., submitted a bid of $205,000. Time, Aug. 30, 1908.

DREDGING.—Seattle, Wash.—Bids were received on July 12 by Maj. H. M. Chittenden, Corps Engrs., U. S. A., for dredging (1) Grays Harbor and (2) Willapa River, Wash. The North American Dredging Co., San Francisco, Cal., was lowest bidder at (1) 15½ cts., and (2) 26 cts. a cu. yd. Estimated quantities: (1) 1,200,000 cu. yds.; (2) 84,000 cu. yds.

*IMPROVING CHANNELS.—Des Moines, Iowa.—We are officially advised that no bids were received on July 10 by the Board of Public Works, "for improving channels of the Raccoon and Des Moines Rivers, work to begin Aug. 10, 1907, and to be completed April 1, 1910." Work will be readvertised at once. Estimated cost, $250,000. George D. Dobson is City Engr., Des Moines.

FIRE ALARM SYSTEM.—Albany, N. Y.—The Board of Contract and Supply has awarded to the STAR ELECTRIC CO., of Binghamton, N. Y., the contract for installing a new fire alarm system for the city, at $16,997. The company agrees to install the system, and allow a six months' trial by the city before payment of the contract price. M. H. Higgins is Ch. of Fire Dept.

TROLLEY APPROACHES.—Brooklyn, N. Y.—Bids were received by James W. Stevenson, Comr. of Bridges, on July 23 for the construction of trolley railway approaches to the Brooklyn Bridge, Boro. of Brooklyn, as follows: Snare & Triest, 147 Liberty St., New York City, $106,280; Chas. Meads & Co., 299 Broadway, New York City, $95,400; J. H. Gray Co., Fuller Bldg., New York City, $106,700.

REMOVING COLUMNS.—Brooklyn, N. Y.—On July 23 bids were received by James W. Stevenson, Comr. of Bridges, as follows, for removing columns at Sands and Washington Sts., Boro. of Brooklyn, Brooklyn Bridge: Chas. Meads & Co., 299 Broadway, New York City, $11,640; Cooper & Evans, 220 Broadway, New York City, $10,870; Snare & Triest, 147 Liberty St., New York City, $12,960.

RIPRAP SEAWALL.—New York, N. Y.—Bids were received as follows by the Park Board on July 18 for riprap seawall along the Bay Ridge Parkway, from Wakeman Pl. to Fort Hamilton Ave., Boro. of Brooklyn, together with all work incidental thereto: F. W. Carlin Construction Co., Kent Ave., Brooklyn; 83 cts. per yd.; O'Brien Bros., Ft. Clinton Ave., Brooklyn, 64c.; Charles Cranford, Foster Ave., Brooklyn, 85c.; Bouker Contracting Co., 17 State St., New York, 83c.

BLASTING AND DREDGING.—Portsmouth, N. H.—Bids were opened July 20 at the Bureau of Yards and Docks, Washington, D. C., for blasting in front of quay wall at the Navy Yard at Portsmouth, N. H. Item 1—Price for dredging whole area complete in accordance with plan and specification. Item 2—Price for dredging whole area complete in accordance with bidder's plans: R. G. Packard Co., 130 Pearl St., N. Y., (1) $169,000. Eastern Dredging Co., 247 Atlantic Ave., Boston, Mass., (1) $126,867; (2) $122,867. Johnston & Virden, Lewes, Del., (1) $122,100; (2) $119,900.

TEST BORINGS.—New York, N. Y.—Bids were received by James W. Stevenson, Comr. of Bridges, on July 23 for making test borings at the site of a new bridge over the East River, between the boroughs of Manhattan and Brooklyn, as follows: Manhattan Drilling Co., 95 Liberty St., $6.75 per lin. ft.; American Test Boring & Drilling Co., 32 Broadway, $7.68 per lin. ft.; Healy Sewer Machine & Con. Co., 21 Park Row, $4.79 per lin. ft.; United Engineering & Contracting Co., 32 East 33d St., $5.95 per lin. ft.; Grant Rohrer, 299 Broadway, $7.41 per lin. ft.; American Diamond Rock Drill Co., 90 West St., $11.25 per lin. ft.

DREDGING.—Charleston, S. C.—Bids were opened July 20th at the Bureau of Yards and Docks, Washington, D. C., for dredging at the Navy Yard at Charleston, S. C. Item 1—dredging 575,000 cu. yds. Item 2—removing cofferdam and sawing off sheet filing: Howard Trumbo, Key West, Fla., (1) 18.49 cts. per cu. yd.; (2) $5,000. Roderick G. Ross, Jacksonville, Fla., (1) 16 cts.; (2) $4,000. Coastwise Dredging Co., Norfolk, Va., (1) 22 cts.; (2) $9,995. North American Dredging Co., 13-21 Park Row, N. Y., (1) 14.9 cts.; (2) $5,000. Cataract Dredging Co., 701 Maryland Trust Bldg., Baltimore, Md., (1) 17⅞ cts.; (2) $3,300.

LEVEE WORK.—Clarksdale, Miss.—Bids are asked until July 29 by the Levee Board, Clarksdale, for the following levee work: Enlargement, Sections 1 to 17, inclusive, containing 450,000 cu. yds.; Sects. 30 to 34 (except 33), inclusive, 138,500 cu. yds.; banquette on Sects. part 43 to 50, inclusive, 126,400 cu. yds.; Sect. 80 and most of 81, 142,000 cu. yds.; part of 16H, all of 17H, part of 18H, 98,900 cu. yds., new levee, part 18H and 19H; upper division (field work), 296,000 cu. yds.; middle division (woods), 195,000 cu. yds.; lower division (field), 298,000 cu. yds.; enlargement, part Sects. 21H and 22H, 51,000 cu. yds. T. G. Dabney, Ch. Engr.

bia Engineering Works, Produce Exchange Annex, $8,500; Alex. Miller & Bro., Jersey City, N. J., $7,900; The Monad Engineering Co., 147 Cedar St., New York City, $9,600; Burlee Dry Dock Co., Staten Island, N. Y., $3,780.

TRAVELING CRANES.—Bremerton, Wash.—Bids were opened at the Bureau of Yards and Docks, Washington, D. C., July 20, for two 20-ton 4-motor electric traveling cranes, Navy Yard, Puget Sound, Wash. Item 1—Two cranes in accordance with specifications. Item 2—One crane in accordance with specifications. Item 3—One crane in accordance with specifications, auxiliary hoist omitted. Item 4—One crane in accordance with specifications, auxiliary hoist omitted, but provision made for its future installment; Item 5—Two cranes according to bidder's own plans and specifications: Modern Steel Structural Co., Waukesha, Wis., Item 1, no bid; (2) $6,425; (3) $5,900; (4) $5,900; (5) $12,000; (all bids conditional). Ransome Concrete Machinery Co., Rock Ave. and Second St., Dunellen, N. J., Item 1, $9,226; (2) $4,788; (3) $4,196; (4) $4,216. Cleveland Crane & Car Co., Wickliffe, Ohio, Item 1, $13,395; (2) $6,895; (3) $6,000; (4) $6,000; (all bids conditional). Morgan Engineering Co., Alliance, Ohio, Item 1, $15,300; (2) $8,000; (3) $7,100; (4) $7,350.

CONTRACT PRICES.

(denotes that this work is advertised in Engineering News.)*

PAVING.—Denver, Colo.—One bid only was received by the Board of Public Works on July 16 for paving Broadway, Paving Dist. No. 3. It was submitted by THE COLORADO CO., and contract was awarded to this company. The itemized prices were as follows:

3,050 ft. 6" × 18" stone curb	$1.05
2,750 yds. brick gutter	2.25
22,900 yds. street asphalt pavement	2.25
704 ft. oak header	.50
945 ft. 27" pipe sewer	2.40
580 ft. 24" pipe sewer	2.00
580 ft. 21" pipe sewer	1.75
580 ft. 15" pipe sewer	1.10
398 ft. 12" pipe sewer	.86
516 ft. 10" pipe sewer	.75
12 manholes	45.00
17 catch-basins	65.00
10 M. ft. lumber	30.00
Total	$69,218

PAVING.—Cincinnati, Ohio.—The Board of Commissioners, Hamilton County, received the following bids on July 19 for improving Lick Run Pike: (A) N. Rubel, 1957 Harrison Ave.; (B) A. J. Henkel & Bro., 703 Mercantile Library Bldg.; (C) M. Sullivan & Son, 703 Mercantile Library Bldg.; (D) The Louis Drach Const. Co., 26 Guarantee Title & Trust Bldg., all of this city. The bids in detail were as follows:

	(A)	(B)	(C)	(D)
20,000 cu. yds. embankment	$0.50	$0.30	$0.50	$0.18½
500 cu. yds. excavation	.50	.30	1.50	1.00
1,530 cu. yds. crushed stone	2.25	2.00	1.80	2.25
265 cu. yds. screening	2.50	2.00	2.00	2.25
100 cu. yds. Portland cement concrete	10.00	5.00	8.00	8.00
400 lin. ft. 12" pipe	1.00	1.40	1.50	1.00
10 lin. ft. 12" slant	1.50	.90	1.00	.80
30 lin. ft. 4' box culvert concrete	8.50	6.00	7.50	6.00
60 lin. ft. 5' box culvert concrete	9.00	8.00	10.00	7.00
2,350 lin. ft. 7' box culvert concrete	13.50	16.00	13.00	16.00
650 lin. ft. 8' box culvert concrete	16.00	17.00	17.50	18.00
18,400 sq. yds. rolling	.03	.03	.02	.03
6 Rd. manholes	40.00	30.00	50.00	40.00
Totals	$60,952	$60,851	$61,197	$60,138

STEAMBOAT REPAIRS.—New York, N. Y.—Bids were received on July 17 by the Board of Health for certain alterations and repairs to the steamboat "Franklin Edson" for the Department of Health, Dr. Thomas Darlington, Pres. The bids were as follows: George F. Stewart, New York City, $9,750; John F. Walsh, Jr., 137 Charlton St., $8,150; James Shewan & Son, Ft. Houston St., E. R., $7,498; Louis L. Bernier, New York City, $7,900; James Tregarthen & Son, Foot 7th St., New York City, $7,900; Colum-

WATER MAINS.—New York, N. Y.—Itemized bids were received on July 11 by the Board of Water Supply, Gas and Electricity for furnishing, delivering and laying water mains in New Chambers, Water, Oliver, Henry and Pike Sts. and James Slip, Manhattan and Bronx. The bidders were: (A) The Wilton Construction Co., 119 Elliott Ave., Williamsbridge; (B) Louis D. Gregory, 342 East 125th St.; (C) W. F. Norton, 303 Douglas St., Brooklyn; (D) Atlanta Contracting Co., 434 East 91st St., New York.

	(A)	(B)	(C)	(D)
1,050 tons straight pipe to furnish and deliver	$37.75	$40.00	$37.00	$36.00
50 tons of branches and special castings to furnish and deliver	70.00	70.00	70.00	75.00
15 tons flanged pipe and castings to furnish and deliver	85.00	100.00	60.00	70.00
7 tons gate valve boxes, manhole heads and covers	56.00	70.00	55.00	70.00
25 cu. yds. rock excavation, without blasting	.60	.01	5.00	6.00
250 cu. yds. rock excavation	.60	.01	.01	3.00
150 yds. masonry excavation, without blasting	2.00	5.00	2.00	2.00
8,500 cu. yds. earth excavation	.60	1.50	.80	.40
8,500 cu. yds. filling and embankment	.50	.10	.20	.20
5,600 lin. ft. 30" pipe to lay	1.45	1.00	1.10	1.40
100 lin. ft. 20" pipe to lay	1.00	1.00	.75	.80
600 lin. ft. 12" pipe to lay	.50	.70	.50	.50
800 lin. ft. 6" pipe to lay	.25	.40	.25	.25
60 lin. ft. 36" flanged pipe to lay (complete)	2.50	4.00	2.00	2.00
4 30" screw gate valves to furnish & deliver	500.00	700.00	425.00	375.00
5 12" screw gate valves to furnish & deliver	48.00	80.00	40.00	40.00
5 6" screw gate valves to furnish & deliver	22.00	40.00	16.00	15.00
5 double-nozzle standard N. Y. hydrants	40.00	80.00	45.00	34.00
4 30" screw gate valves and boxes to set	100.00	50.00	.01	300.00
5 12" screw gate valves and boxes to set	10.00	30.00	.01	40.00
5 6" screw gate valves and boxes to set	10.00	20.00	.01	15.00
5 double-nozzle standard N. Y. hydrants to set, including the furnishing of lead-lined drain pipe, galvanized-iron pipe fastenings, etc.	15.00	30.00	.01	20.00
5 blow-offs, to set	20.00	20.00	25.00	20.00
1 36" × 30" connection	1,500.00	1,300.00	1,000.00	1,000.00
1 30" × 30" connection	1,500.00	1,200.00	900.00	750.00
180 cu. yds. brick masonry	20.00	.01	15.00	15.00
100 cu. yds. concrete masonry	8.00	.01	7.00	3.00
2,500 sq. yds. asphalt, brick or wood pavement, restored	4.15	4.50	4.40	3.75
450 sq. yds. granite block pavement, restored	2.00	2.00	2.00	2.00
650 sq. yds. pavement and flagging, to relay and restore	.50	.80	.60	.50
150 lin. ft. curb and gutter, to reset	.01	.01	.01	.10
10,000 ft. B. M. sheet piling and timber	40.00	.01	.01	30.00
Totals	$86,716	$88,167	$68,689	$77,715

GRADING, SIDEWALKS, ETC.—Brooklyn, N. Y.—Bids, in detail, were received as follows by Bird S. Coler, Pres. Boro. Brooklyn, on July 17 for regulating, grading, curbing, and laying sidewalks on Coney Island Ave., from Kings Highway to Neptune Ave.: (A) 18,000 lin. ft. new curbstone to be set in concrete; (B) 26,770 cu. yds. earth excavation; (C) 84,770 sq. ft. cement sidewalk; (D) total; all are Brooklyn contractors: F. J. Gallagher, 490 Park Place, (A) 99 cts., (B) 35 cts., (C) 16 cts., (D) $41,347; Seaboard Construction Co., 639 Gates Ave., (A) $1.08, (B) 49 cts., (C) 16 cts., (D) $46,968; Charles Cranford, Foster Ave., (A) 95 cts., (B) 50 cts., (C) 14 cts., (D) $42,923; N. Schneider Sons Co., 144 21st St., (A) $1.04, (B) 34 cts., (C) 15 cts., (D) $41,161; Daniel Douglas, 303 Pitkin Ave., (A) $1.08, (B) 40 cts., (C) 16 cts., (D) $44,259; John E. Quinn, 71 Marlborough Road, (A) 98 cts., (B) 37 cts., (C) 15 cts., (D) $40,838; Bracken McAveney Co., Foot Sixth St., (A) 95 cts., (B) 47 cts., (C) 15½ cts., (D) $42,391.

MISCELLANEOUS CONTRACTS.

(Continued from page 31.)

LEVEE.—Rock Island, Ill.—Bids are asked by the Drury Drainage District, Wallace Treichler, Engr., until July 30, for 312,000 cu. yds. levee work, and 192,000 cu. yds. ditch work.

CRIB BULKHEAD.—Brooklyn, N. Y.—Bids are asked until 11 a. m., Aug. 7, by Bird S. Coler, Boro. Pres., for building a crib bulkhead on the Eighth Ward Market, between 36th and 37th Sts., Second Ave., and New York Bay, Brooklyn. Estimated cost, $156,934.

PIER.—New York, N. Y.—Bids are asked until noon, Aug. 6, by J. A. Bensel, Comr. of Docks, for building a new pier at the foot of James Slip, and for preparing for and building a new bulkhead platform easterly from said pier, between James Slip and Oliver St., East River.

DREDGING.—Piper City, Ill.—Bids are asked by the Commissioners of Vermilion Special Drainage District at the First National Bank Bldg., Piper City, until July 31 for 44,450 cu. yds. of dredge or machine ditch work and 62,460 cu. yds of scraper ditch work.

DRILLING APPARATUS.—Muskogee, Ind. T.—Bids are asked until July 27 by J. Geo. Wright, Comr. of Five Civilized Tribes, Muskogee, for drilling apparatus as follows: 2,000 ft. single cylinder, hydraulic-feed diamond-core drill with 12-in. run, drilling capacity 2,000 ft.; an 800-ft. single cylinder hydraulic-feed diamond-core drill, 12-in. run, drilling capacity of 800 ft.

*DREDGING.—Block Island, R. I.—Bids were received on July 17 by Lieut. Col. J. H. Willard, Corps Engrs., U. S. A., for dredging in harbor at Block Island as follows: J. S. Packard Dredging Co., 425 Angell St., Providence, R. I., 40 cts. a cu. yd.; Charles M. Cole, Fall River, Mass., 38 cts.; Maritime Dredging Co., 78 Broad St., New York, 39½ cts.

*DREDGING.—Boston, Mass.—Bids were received by the Board of Harbor and Land Commissioners, Boston, on July 12 for dredging a channel in West Falmouth Harbor and an area in Nantucket Harbor to increase the anchorage area near wharves. Frank W. Hodgdon is Ch. Engr. Contract was awarded to JOHN H. GERRISH, Melrose, Mass., at 32 7-10 cts. a yd. for West Falmouth Harbor; and 27 3-10 cts for Nantucket Harbor.

DREDGING, BREAKWATER.—New York, N. Y.—The following are the bids opened on July 10 by Col. John G. D. Knight, Corps Engrs., U. S. A., for dredging (a) Coney Island Channel, (b) Flushing Bay (price given per cu. yd., scow meas.): N. J. Terminal Dock & Improvement Co., 62 Cedar St., (a) 31.5 cts.; R. G. Packard Co., 130 Pearl St., (a) 35 cts.; Maritime Dredging Co., 78 Broad St., (a) 31 cts., (b) 19⅝cts.: Morris & Cumings Dredging Co., 17 State St., (a) 27.4 cts.; John & Jos. McSpirit, 118 Wayne St., Jersey City, N. J., (b) 39 cts.; J. M. Briggs, 154 Nassau St., (b) 29.7 cts.

FREIGHT SHEDS.—New York, N. Y.—Bids are asked until July 26 (extension of date) by J. A. Bensel, Comr. of Docks, for contract 1054.—Furnishing material and for preparing for and building freight sheds on piers Nos. 54 and 56, North River, between foot of Little West 12th and West 14th Sts., on Chelsea section, with lateral extensions on adjacent bulkhead platforms. Security required $232,000.

Bids are asked until Aug. 13, on contract 1090.—For furnishing all the labor and materials required for preparing for and building freight sheds on piers 57, 58 and 59, between West 14th and West 19th Sts., North River, with lateral extensions on the adjacent bulkhead platforms.

READERS' WANTS

If you are in the market for material, equipment or supplies, and fail to find it in our advertising pages, send us full particulars, and we will gladly put you in touch with the right parties.

Also ask for our BUYERS' GUIDE

COLLAPSIBLE STEEL CENTERS.—New York, N. Y.—We are advised by J. F. Farish, 207 Dyckman St., New York, that he desires catalogs and information relative to collapsible steel centers for concrete work.

CONTRACTORS' EQUIPMENT.—Galveston, Tex.—We are in receipt of advices from Chas. Clarke & Co., Galveston, Tex., stating that they are in the market for general contractors' equipment including rails, dump cars, locomotives, excavators, pile drivers, etc.

TRADE PUBLICATIONS.

RUBBER HOSE AND FITTINGS.—Morgan & Wright, Detroit, Mich. Paper; 3½ × 6 ins.; pp. 48.

This is a price-list of the various lines manufactured by this concern, for all uses.

FLUE CLEANING MACHINERY.—Joseph T. Ryerson & Son, Chicago, New York, Pittsburg. Bulletin No. 21; paper; 8½ × 11 ins.; pp. 4; illustrated.

A flue cleaning machine is described in this bulletin.

ROOFING.—The Philip Carey Mfg. Co., Sta. R, Lockland, Cincinnati, Ohio. Paper; 4¾ × 6¾ ins.; pp. 28; illustrated.

This booklet is a broad description of the Carey roofing materials and their ingredients.

EXPANSION BOLTS.—The Star Expansion Bolt Co., 147-149 Cedar St., New York City. Catalog No. 16; paper; 6 × 9 ins.; pp. 28; illustrated.

Expansion bolts, toggle-bolts and allied hardware lines are the subject matter of this catalog. Prices are given.

GAS AND GASOLINE ENGINES.—The Jacobson Machine Mfg. Co., Warren, Pa. Bulletin "C"; paper; 6 × 9 ins.; pp. 16; illustrated.

This Bulletin describes the "hit-and-miss," 4-cycle stationary and portable engines manufactured by this company.

PACKINGS.—Morgan & Wright, Detroit, Mich. Paper; 3½ × 6 ins.; pp. 32; illustrated.

This is a descriptive price-list of various styles of packing for marine and stationary power plants, valve washers, pump diaphragms, etc.

"ELECTRIC TRAIN LIGHTING."—The General Electric Co., Railway Dept., Schenectady, N. Y. Bulletin No. 4500; paper; 8 × 10½ ins.; pp. 8; illustrated.

This bulletin describes turbo-generators of 15, 20, 25 and 35-KW. capacities, direct current, for installation both on the locomotive and in the baggage car.

CEMETERY FENCE. — The Stewart Iron Works Co., Cincinnati. Bulletin No. 1; paper; pp. 4; illustrated.

This is the first of a new series of bulletins, to be issued by the company hereafter monthly. This one describes special design and shows two photographs of installations.

DOMESTIC HOT-WATER HEATERS.—The Ruud Mfg. Co., Pittsburg. Paper; 4 × 6 ins.; pp. 12; illustrated.

"A Little Talk on Home Comfort" is the title of this booklet. The Ruud heaters are operated by gas, automatically when water is drawn. Architects will find the booklet of interest.

MECHANICAL LOCOMOTIVE STOKERS.—The Locomotive Stoker Co., Chicago. Paper; 4 × 7 ins.; pp. 8; illustrated.

The W. H. Strouse patent stoker, as made by this company, is succintly described in this pamphlet. The stoker is steam operated and starts automatically on opening the throttle.

"INTRA STEEL."—Herman Boker & Co. 101 Duane St., New York City. Paper; 6 × 8¾ ins.; pp. 12.

"Intra Steel" is tougher than the best carbon tool steels; the cutting power and durability are claimed to be from 50% to 75% higher. Working instructions are given, and instructions for tempering as well.

MILLING MACHINES AND FORGES.—The Burke Machinery Co., Cleveland, O. Sheets for insertion in Morden price-book; 4 × 7¼ ins.; pp. 20; illustrated.

These sheets cover milling machines and attachments therefor, knockouts for them, drill presses, tapping machines, and a kerosene forge for machine shop use. One sheet is devoted to prices.

PORTABLE AIR COMPRESSORS. — The Abenaque Machine Works, Westminster Station, Vt. Paper; 6 × 9 ins.; pp. 8; illustrated.

The compressor outfits described in this pamphlet are gasoline driven; they are suitable for furnishing power for driving drills, riveters, etc., in contracting and structural work.

FEED WATER HEATERS.—The Harrison Safety Boiler Works, 17th St. and Allegheny Ave., Philadelphia. Paper; 8½ × 11 ins.; pp. 4; illustrated.

This sheet is a description of a concrete case of exhaust steam saving in the Pittsburg steel works, by the installation of a Cochrane feed water heater. Cost figures and savings are given.

STREET RAILWAY CONTROLLERS.—The General Electric Co., Railway Dept., Schenectady, N. Y. Bulletin No. 4515; paper; 8 × 10½ ins.; pp. 4; illustrated.

This bulletin covers auxiliary contactor equipment for cylinder controllers, to meet the new requirements imposed by increased power and higher voltages now being used on many electric railways. The auxiliary contactors eliminate heavy arcing, and consequently reduce wear and tear on the controller fingers through burning.

SMOKELESS COMBUSTION.—The Hawley Down-Draft Furnace Co., Superior and Townsends Sts., Chicago; New York, 149 Broadway. Paper; 10 × 7 ins.; pp. 16; illustrated.

Complete combustion, and consequent economy in power generation, is the mission of the Hawley furnace. It is explained in this pamphlet, which describes the system for both flue and water-tube boilers. Photographs of large existing installations are shown.

PUMPS.—The Buffalo Steam Pump Co., Buffalo. Catalog No. 187; paper; 6 × 9 ins.; pp. 132; illustrated.

Steam power, centrifugal and turbine pumps are described in this catalog, as well as fittings and attachments. Curves showing results of tests are given in section 2, devoted to centrifugal and turbine pumps. The entire catalog is one that will prove good literature for pump-users.

PNEUMATIC TOOLS. — The Independent Pneumatic Tool Co., First Nat'l Bank Bldg., Chicago. Catalog, No. 7; paper; 9 × 12 ins.; pp. 12; illustrated.

The "Thor" pneumatic tools—a large line including hammers, drills of various sizes and styles, portable, rotary saws, etc.—are described. The drills are driven by microscopic reciprocating engines; the saws by turbines.

PROTECTIVE PAINT.—The Arlington Mfg. Co., Canton, Ohio. Two paper pamphlets; one booklet, 3½ × 6 ins., pp. 12; one folder, 6 × 3½ ins., pp. 8; illustrated.

"Carbonelastic Coating" is the specialty covered by these pamphlets; it is a protection for iron and steel work about smelting plants, ice and refrigerating plants, and on all structural work.

STEAM AND WATER REGULATORS.—The Locke Regulator Co., Salem, Mass. Catalog M. Paper; 6 × 9 ins.; pp. 56; illustrated.

Devices for the conduct and control of water and steam pressure, for pumping stations, furnaces, boiler feed-pumps, etc., are covered by this catalog; also, safety-valves, reducing valves, steam-traps, steam-separators, and all kindred apparatus. Prices are given.

"HYDRAULIC MACHINERY."—The Waterbury Farrel Foundry & Machine Co., Waterbury, Conn. Catalog section "H." Paper; 6 × 9 ins.; pp. 152; illustrated.

This catalog describes hydraulic machinery for such industrial operations as the manufacture of drawn metallic tubing, rods, shafting, etc.; punch-work of all kinds; shearing; squirting wire for fusible plugs, etc. It also includes valves, power pumps and hydraulic accumulators.

OIL DRAWING PROCESS FOR WELLS.—Ingenieur Bruno Leinweber, Vienna, Austria. Paper; 5 × 8 ins.; pp. 21; illustrated.

This booklet describes, in both German and English, the "Foerderverfahren Haulin Process" for drawing crude oil from wells. The system is applicable for depths up to and greater than 1,500 meters (roughly 5,000 ft.). An illustrated description of a test in practice forms part of the subject matter.

COVER PAPERS. — Henry Lindenmeyr & Sons, New York City. Paper (samples); cover 6 × 9 ins.

For anyone contemplating the issue of a catalog or advertising booklet, this book of sample papers will be of assistance. It is artistically made up and covers a wide range of papers. Subsidiary samples and lists of other styles of papers are included in the book received.

STREET LAMP.—General Electric Co., Schenectady, N. Y. Bulletin 4504. Paper; 8 × 10½ ins.; pp. 4; illustrated.

The tungsten lamp has now been developed for the series incandescent system. The lamps are rated at 1.25 to 1.50 watts per candle power and with proper reflectors give an effective candle power at an angle of 30° of one watt per candle power. They are at present manufactured for 4, 5.5, 6.6, 7.5 ampere systems.

MECHANICAL DRAFT.—The Green Fuel Economizer Co., Matteawan, N. Y. Bulletin 108; paper; 6 × 9 ins.; pp. 16; illustrated.

Several mechanical draft plants of extraordinary size are described in this booklet. Photographs are shown of nearly a dozen other large plants and also drawings and layouts of a number of large and interesting installations, including the new Hoboken terminal of the Lackawanna R. R. A portion of the book is devoted to the Green Fuel Economizer, which is often put in with mechanical draft fans because both are beneficial under similar conditions and complementary in promoting fuel economy. Any one owning or operating boiler plants will find valuable information in this booklet.

BALL AND ROLLER BEARINGS. — The Bantam Anti-Friction Co., Bantam, Conn. 13 × 21 ins.; pp. 4; illustrated.

As a unique sandwich of industrial advertising—two pages of illustrated and priced descriptive matter relative to Bantam bearings, between two pages of bona fide rural newspaper, local happenings, sage epigrams, etc.—the "Bantam Anti-Friction Booster," June, 1907, is worth sending for. It is, so to speak, a sugar-coated commercial pill for such as have symptoms of friction to be treated.

ELECTRIC TRAIN LIGHTING.—The Blim Electric Car Lighting Co., St. Paul Ave. and 13th St., Milwaukee. Bulletins Nos. 20 and 30; paper; 8 × 10½ ins.; pp. 12 and 24, respectively; illustrated.

These two bulletins cover complete Blim equipment for axle-drive car lighting. No. 30 covers truck-mounted, belt driven generators with "bucker" control, battery current regulation; descriptions of subsidiary apparatus—shunts, switches, etc.—are given, and a number of circuit diagrams on separate sheets clarify comprehension of the system. No. 20 covers the Type "F" regulator for controlling the current supply.

FEED-WATER HEATERS.—Harrison Safety Boiler Works, 17th St. and Allegheny Ave., Philadelphia, Pa. Paper; 6 × 9 ins.; pp. 8; illustrated.

This bulletin claims that Cochrane Feed-Water Heaters now in use are earning an average of over 200% annually on their first cost, and points out some of the advantages of a system of feed-water heating and purifying to make this possible. The Cochrane Heater is essentially a chamber in which exhaust steam and cold water are brought into actual contact. The steam enters through an oil separator bolted to the heater and the water flows into a trough at the top and thence over and along a series of perforated trays.

ELECTRICAL APPARATUS.—Fort Wayne Electric Works, Fort Wayne, Ind. Bulletins. Paper; 8 × 10½ ins.; illustrated.

Bulletin 1094. This describes construction features of belted direct current generators having base, field frame and one pedestal case in a single piece.

Bulletin 1095. The latest type of alternating-current multiple arc lamps developed by this concern are herein described. It is claimed that troubles from poor and variable light, noise and gases have been eliminated. The entire lamp is built about a central brass tube as a foundation. The construction is given in detail.

Bulletin 1096. The standard shell type of transformers made by the Fort Wayne Electric Works in sizes from 0.6 to 50 KW. is the subject treated in these eight pages. The general character of design is indicated.

STEAM TRAPS.—Moorehead Mfg. Co., Detroit, Mich. Paper; 6 × 9 ins.; pp. 40; illustrated.

The steam trap for draining condensation from steam piping systems, developed by the Moorehead Co., is of simplified construction. The tank consists essentially of a steel tank, swung on brass trunnions, between two supports secured to a cast-iron bed plate. These supports consist of the valve connection on one side and the water connection on the other, in such a shape as to form a secure rest for the trunnions. The tank is counterbalanced by a cast-iron counterweight on the end of a wrought iron lever. At the point of application of this lever to the tank an extension rod engages with a lever controlling the steam valve. The employment of buckets, pans, springs, has been eliminated.

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